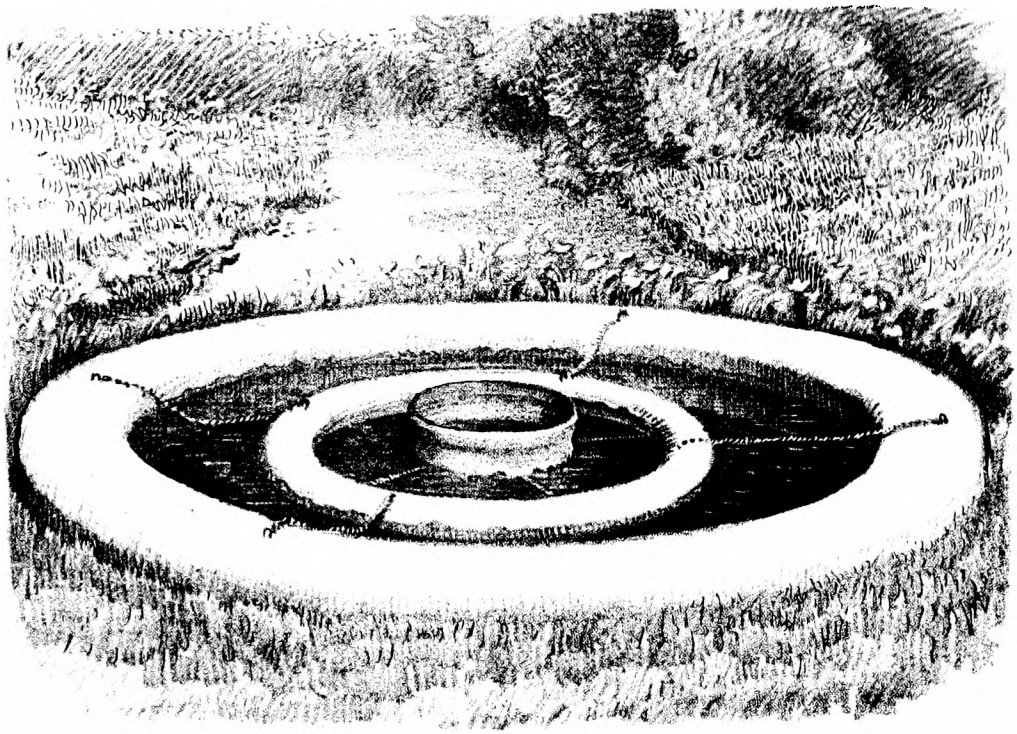
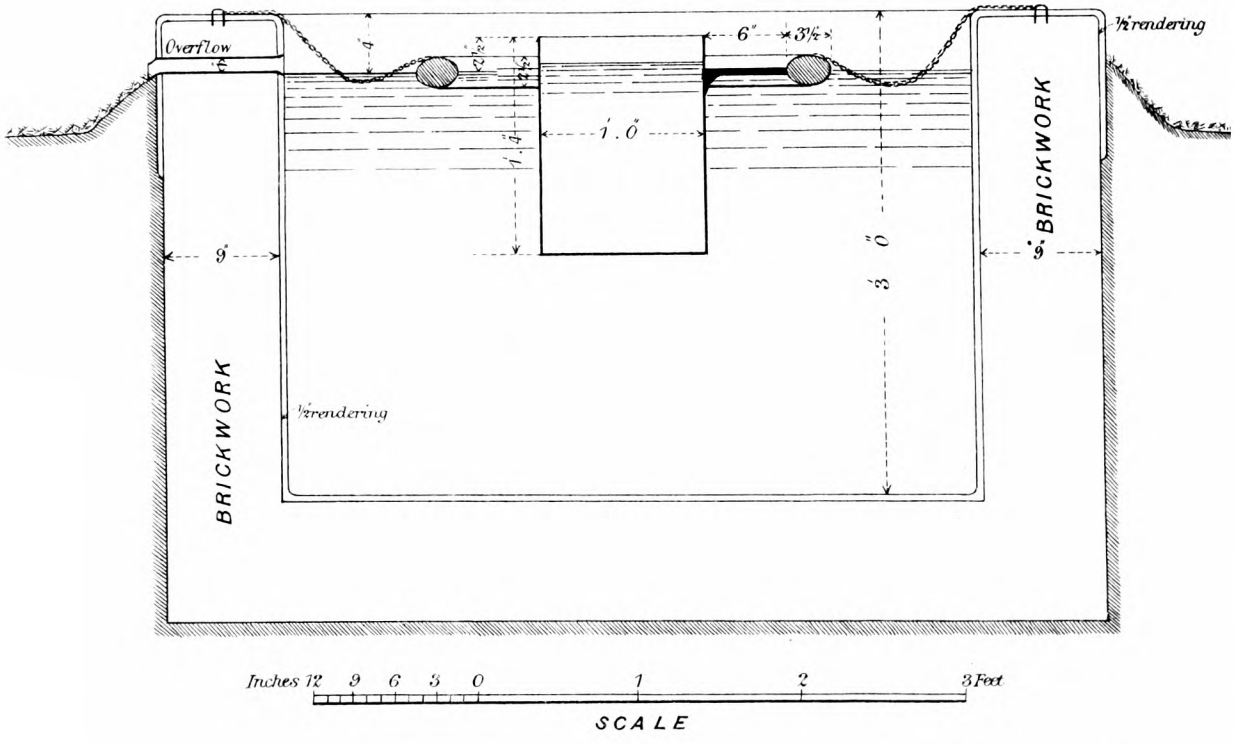
BRITISH RAINFALL,

1897.

SHIELD, Printer
29 Cadogan Gardens, Chelsea
Works Lancelot Place,
Brompton Road.

Mr BALDWIN LATHAM'S EVAPORATOR AT CROYDON.





Stanford's Geog.l Estab.t London

BRITISH RAINFALL, 1897.

ON

61915

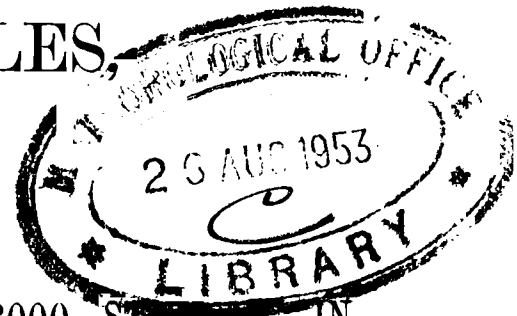
THE DISTRIBUTION OF RAIN

OVER THE

BRITISH ISLES,

DURING THE YEAR

1897,



AS OBSERVED AT MORE THAN 3000 STATIONS IN GREAT BRITAIN AND IRELAND,

WITH ARTICLES UPON VARIOUS BRANCHES OF RAINFALL WORK.

COMPILED BY

G. J. SYMONS, F.R.S.,

CHEVALIER DE LA LÉGION D'HONNEUR,
ALBERT MEDALLIST FOR 1897,
Secretary Royal Meteorological Society; Membre du Conseil Société Météorologique de France. Member Scottish Meteorological Society; Korrespondirendes Mitglied der Deutschen Meteorologischen Gesellschaft; Fellow of Sanitary Institute; Fellow Royal Colonial Institute; Membre correspondant étranger Soc. Royale de Médecine Publique de Belgique, Socio correspondiente Sociedad Cientifica Antonio Alzate, Mexico, &c.

AND

H. SOWERBY WALLIS,

Fellow Royal Meteorological Society; Member Scottish Meteorological Society; Member Sanitary Institute.

LONDON:
EDWARD STANFORD, COCKSPUR STREET, S.W.
1898.

ERRATA IN BRITISH RAINFALL, 1896.

Page 10, line 7th, *for* 1739 *read* 1737.
,, 35, line 16th from bottom, *for* 1729 *read* 1739.
,, [148]. Isfield Place, *for* 29·46 *read* 27·27.
,, [150]. Swarraton Rectory, *for* 259 *read* 179.
,, [186]. Harrogate, *for* St. Mary's Avenue *read* Harlow Hill.
,, [191]. Cleator Moor W. W.—*omit* 114·96?
,, [196]. Newtown (Dolfor)—*omit* return.

BRITISH RAINFALL, 1897.

A good illustration of the trouble arising from the late transmission of returns occurs on p. [136], where the total for Haddo House is given as 29·94. After that sheet was printed—viz., on June 27th—we learned that the true figures were, for February ·71, and for May 1·96, making the total (as given on p. [224]) 30·55.

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BRITISH RAINFALL, 1897.

AT last we have turned the corner, and though the present volume contains more records, and is in several respects more elaborate than any previous one, it will, we hope, be in our readers' hands earlier than any corresponding volume for some few years past.

Nothing could be further from our desire than to say anything which, even indirectly, looks like a censure upon our observers, to whom we are indebted, both for the returns and for nearly all the funds required for our work—but there are just a few who cause great delay and trouble by not sending their reports promptly. We do not like to leave any records out, but it is rather too bad to ignore first, second, and even third applications, and not send 1897 returns until July, 1898.

We are very glad to say that, as regards Sutherlandshire, in which we mentioned last year that additional stations were much needed, great improvement has been effected; but more correspondents, especially in Scotland, would be very welcome.

G. J. SYMONS.
H. SOWERBY WALLIS.

62, CAMDEN SQUARE, LONDON, N.W.
July 14th, 1898.

REPORT.

Correspondence.—Though it is obvious that with a staff of between 3,000 and 4,000 observers this is very heavy, we are glad to say that it is rare for us to be behind in that matter, but what with it, and what with the verification of the yearly increasing mass of records, the pressure upon us and our small staff is becoming very serious. Year by year more and more checking is done with the view of approaching nearer and nearer to perfect accuracy, and the consciousness that we have succeeded is the best reward for all the work which it entails.

Verification.—We have often referred to the complex and multiple checking which every record receives, but it is really becoming a question how far it is necessary to pursue it, for we find that in the great majority of cases where figures are published differing from those sent to us, it is the other returns which are wrong, so that after double correspondence we find that we were right in the first instance—this is, in one respect, very satisfactory, but the satisfaction is dearly purchased by time wasted in consequence of carelessness by others.

Inspection of Stations.—We are very glad that we have been able to do a little more of this than in previous years, and we shall do all in our power further to increase it, but there are two remarks bearing upon this subject to which we desire to direct attention; (1) that reference to the General Tables at the end of this volume shows in many counties values so closely accordant as to leave no room for doubt as to the accuracy of the records, and therefore that inspection, though always desirable, cannot in those cases be regarded as absolutely urgent; (2) that it would be a very good plan if observers would "inspect" their own stations! By this we mean that, taking in their hands the Rules for Observers at the end of the present volume, they should devote a quarter of an hour to examining

their own rain gauge and its environment. Seeing that the former is in every respect sound and in such repair as they would like it to be if an inspector suddenly called upon them. Noticing also the presence of trees and tall flowers. Trees are specially objectionable—the tendency of the genus *homo* is to surround his residence with trees, and usually when he starts a rain gauge he selects a fairly suitable site, and as the trees grow only a few feet per annum, the observer, going daily to measure the rainfall, does not notice that their height is increasing, and when the inspector points out that they are too high, the observer is loth to believe his own eyes, and still more loth to have the trees cut down. If our observers will all act as Inspectors, much good will result, but they really must take the Rules with them, or else they will break Rule II., and so, in trying to do good, do harm.

Additional Observers.—Another respect in which some of our correspondents do, and others could, render great help is by enquiring among their friends whether they are having accurate records kept of the fall of rain, and, when they hear of any not quoted in these pages, reporting to us. Moreover, our correspondents residing as they do in all parts of the country can easily see where new stations are needed, and have far better opportunities for inviting suitable persons to take up the work than we in London can have. Each has only to take out the map of his own county, spread it on his table, lay a penny on the site of each station mentioned in our General Tables, and he will see at once in what (if any) part of his county stations are still needed; and then he has only to think over who reside there, and speak to them the next time he meets them. We shall be delighted to supply any necessary forms, rules, or advice in our power. Everybody would admit that it must have taken much hard work to raise a staff of observers from 168 to 3,318, but few would credit the work involved in keeping up so large a staff—in procuring new helpers to replace those lost by removal or by death, and in trying to prevent any of the new ones, or even sometimes the old ones, luxuriating in buying a cheap (?) gauge, or even getting one made by the local tinman, as (we luckily found out in time) was the case with one record offered for insertion in the present volume. We believe that such cases are very rare, but our anxiety would be greatly lessened if we could feel sure that *every* observer was as careful, as we know that the great majority are. We think that there is

ample evidence in the General Tables at the end of this volume, that nineteen-twentieths of the records are absolutely correct, and as regards the other twentieth we have no reason for doubt, or they would not be published, but we should feel more confidence if observers would occasionally "inspect" their own stations.

Bad Rain Gauges.—We have no desire to bring ourselves under the liabilities of the law as to libel, and we therefore say merely that it is possible to buy a thing called a rain gauge which will not give an accurate record. Many persons do not know the wide difference between the terms "low priced" and "cheap," and fancy that they are synonymous. Without further comment, we reproduce from *Arrangements* the following paragraph :—

> *Testing.*—Wherever, and of whomsoever, a rain gauge may be bought, it is very desirable that the purchaser should insist upon having a certificate of its accuracy. Rain gauges are examined and certificates issued by Kew Observatory, and by ourselves, the charge in each case is the same, namely, 2s. 6d.

Rain Gauges Overflowing.—In early years we had frequently to refer to this serious and vexatious occurrence. The general use of Snowdon pattern gauges, which will hold 8 or more inches, has nearly stopped this evil—but the events recorded on page [119] show that warning is still needed.

Rainfall from 1725 to 1897.—As will be gathered from the date at which this volume appears, the first half of the year is wholly taken up in its preparation; in fact, quite seven months are so occupied, then all the returns have to be entered in our registers, and the various lists of absentees, &c., completed—and we and our staff need some rest—and in November we have to begin preparing for the following year. This leaves but little time for inspection, and for what can be called original work. It was the knowledge of this difficulty which made us, last year, say that this subject would be dealt with "*if time permits*," and makes us still leave the same words.

Percentage of mean fall which may be expected on one day in each year.—It is not pleasant to acknowledge that one has not done that which one intended to do. If, however, we do not mention the subject, it might be supposed that we have

forgotten it. By no means; but we have been unable to find time to carry the enquiry far enough to publish the results.

The Gorton Bequest.—In our last volume, we pointed out the large amount of good which had been done with that portion of the £100 left to us in 1882 by Miss Nunes, which was devoted to rainfall. We have had another legacy this year; not from any of the wealthy observers who have died (six of them leaving on the average a quarter-of-a-million each), but what may be well described as a widow's mite, though it was not a widow, but Mr. R. Gorton, of Cirencester, who left us £5, and all his instruments. The latter were not equal to modern requirements, but the £5 came in very handy to provide for the renewing of two stations, and for the equipment of the three new ones, which, as mentioned in the usual article on "The Staff of Observers," we have been able to obtain in Sutherland. As with Miss Nunes, so with Mr. Gorton, each helped during life, and both started work which may go on long after they, and we, have had to lay it aside.

Finance.—We are glad to note a little further improvement in this department; for though nine names are absent through death, there are about twenty new ones, giving a net increase of ten; among which we are glad to see that Mr. C. E. Chrimes is continuing the important help given by his father almost from the time, more than 30 years ago, when he provided the unique set of Rotherham Experimental Rain Gauges.

LIST OF ALL SUMS OF £1 AND UPWARDS RECEIVED IN PAYMENT FOR BOOKS, DIAGRAMS, &c., OR AS CONTRIBUTIONS TO THE GENERAL EXPENSES OF RAINFALL INVESTIGATIONS IN 1898.

CORPORATIONS AND WATER COMPANIES.

	£	s.	d.
Accrington Gas and Water Board	1	1	0
Aire and Calder Navigation Company	1	6	0
Barry Urban District Council	1	2	0
Blackburn Corporation	1	1	0
Bolton Corporation	2	2	0
Bradford ,,	1	1	0
Brighton ,,	3	0	0
Bristol ,,	1	1	0
Bury ,,	1	0	0
Cambridge Water Works Co.	1	1	0
Cardiff Corporation	1	1	0
Clevedon Water Board	1	1	0
Doncaster Corporation	1	1	0
G.W.R. Institute	1	1	0
Hastings Corporation	1	1	0
Hornsey Local Board	1	0	0
Hull Corporation	1	1	0
Leicester ,,	1	17	0
Liverpool ,,	1	1	0
London ,,	1	1	0
Manchester ,,	1	1	0
Middlesboro',,	1	1	0
Newcastle and Gateshead Water Company	2	2	0
Nottingham Corporation	1	1	0
Southwark and Vauxhall Water Company	1	1	0
Warrington Corporation	1	1	0
Weaver Navigation Trust	1	6	0

	£	s.	d.
Addington, Rt. Hon. Lord	1	1	0
Ainsworth, Col. D.	1	1	0
,, Col. R. H.	2	10	0
Aitken, R., Esq.	1	0	0
Allcard, Miss	1	0	0
Ames, F., Esq.	1	0	0
,, H. St. V., Esq.	1	1	0
Anderson, W. D., Esq., M.D.	1	0	0
Appach, Miss	1	1	0
Arkwright, J. H., Esq.	1	0	0
Armstrong, Rt. Hon. Lord, F.R.S.	1	10	0
Assheton, R., Esq.	1	10	0
Backhouse, Mrs.	2	0	0
Baines, L. T., Esq.	1	1	0
Baker, W. C., Esq.	1	1	0
Baker-Gabb, R., Esq.	1	1	0
Balfour, D., Esq., C.E.	1	0	0

	£	s.	d.
Ball, Sir R. S., F.R.S. (2 years)	1	1	0
Bankes, J. Eldon, Esq.	1	1	0
Barclay, F. J., Esq.	2	0	0
Barnes, R. H., Esq.	1	1	0
,, R., Esq., M.D.	2	7	6
Barrington, R. M., Esq.	1	0	0
Bass, Messrs., & Co.	3	15	0
Baxendell, J., Esq.	1	1	0
Bayard, F. C., Esq.	2	4	0
Beauchamp, E. B., Esq.	1	0	0
Bell, Major	2	2	0
,, H., Esq.	1	15	0
Bennett, J. B., Esq.	1	8	9
Bentley, E. J., Esq.	1	6	0
,, R., Esq.	1	18	0
Berners, C. H., Esq.	1	1	0
Berridge, W., Esq.	1	5	0

	£	s.	d.
Berryman, F. H., Esq.	1	1	0
Bickham, S. H., Esq.	1	0	0
Biddell, G. A., Esq., C.E.	1	5	0
Blackburn, Prof.	1	0	0
Blackmore, R. D., Esq.	1	1	0
Blackwell, Mrs.	1	1	0
Blake, A. M., Esq.	1	1	0
,, W., Esq.	3	0	0
Blamire, Rev. W. H.	1	6	0
Blathwayte, Col.	1	15	0
Boscawen, Capt. Griffith	1	2	0
Bose, W., Esq.	1	1	0
Boston, Rt. Hon. Lord	3	13	0
Boughton, Miss F. H. R.	1	1	0
Boys, Rev. H. A.	1	0	0
Bradford, late Rt. Hon. Earl of	1	0	0
Bradshaw, Admiral, C.B.	3	0	0
Brady & Mardy, Messrs.	2	2	0
Bramwell, Sir F. J., Bt., F.R.S.	2	2	0
Brodie, C. G., Esq.	1	7	6
Brook, C. L., Esq.	5	5	0
Brooke, W., Esq.	1	1	0
Brooks, Sir W. Cunliffe, Bt.	1	1	0
Brown, Rev. D. D.	1	0	0
,, F. F., Esq.	1	1	0
,, Miss	5	0	0
Brunner, Mond & Co., Messrs.	2	2	0
Buchanan, Col.	1	1	0
,, Sir J., Bt.	1	0	0
Burbidge-Hambly, C. H., Esq.	1	1	0
Burton, Mrs.	1	1	0
,, Rt. Hon. Lord	1	1	0
Bushell, R., Esq.	2	0	0
Butler, W. B., Esq.	1	10	0
Cadell, J. J., Esq.	2	0	0
Caird, J. A., Esq.	1	10	0
Calthorpe, Rt. Hon. Lord	2	0	0
Campbell, Rt. Hon. J. A., M.P.	1	0	0
Carr, Rev. E. D.	1	0	0
Carr-Dyer, Mrs.	1	5	6
Carthew, Captain	1	1	0
Chambers, B. E. C., Esq.	1	6	0
Chancellor, F., Esq.	1	1	0
Chapman, E., Esq.	3	15	0
Charlton, J., Esq.	1	0	0
Chrimes, C. E., Esq.	10	0	0
Christopherson, Rev. A.	1	0	0
Christy, R., Esq.	1	0	0
Church, H. P., Esq.	1	1	0
Clarke, Col., of Achareidh	1	0	0
,, Harvey, Esq.	1	1	0
,, R. Stanley, Esq.	1	6	0
Clay, A., Esq.	1	1	0
,, Messrs. J. T. & Sons	1	1	0
Clutterbuck, Rev. F. C.	1	0	0
,, Capt., R.N.	1	1	0
Cole, Rev. R. E.	1	0	0
Coles, S. H. Cowper, Esq.	1	0	0
Collingwood, E. J., Esq.	1	1	0
Colman, J. J., Esq.	1	0	0
Coode, R. C., Esq.	1	15	0
,, W., Esq.	1	12	3
Cope, Mrs.	1	0	0
Cork, The Rt. Rev. the Bishop of	1	0	0
Corrie, A. J., Esq.	2	2	0
Courtauld, S., Esq.	1	1	0
Courthope, Colonel	1	0	0
Courtown, Rt. Hon. Earl of	1	0	0
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Cowper, Rt. Hon. Earl	1	1	0
Crewdson, W. H., Esq.	1	0	0
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Cross, Carlton, Esq.	1	1	0
,, R., Esq.	1	1	0
Crossman, Gen. Sir W.	1	0	0
,, A., Esq.	1	1	0
Crosthwaite, T. S., Esq., C.E.	1	2	6
Crowley, F., Esq.	1	10	0
,, P., Esq.	1	17	0
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Davis, J., Esq.	1	0	0
Dawson, A. Mitchell, Esq.	1	0	0
Deane, J. W., Esq.	1	0	0
Dearden, J. Griffith, Esq.	1	1	0
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,, E. E., Esq.	5	0	0
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,, H. S., Esq.	1	0	0
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Ellis, The Hon. and Rev. W.C.	2	2	0
Esdaile, C. E. J., Esq.	1	1	0
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,, W. Llewellyn, Esq.	1	10	0
Ewart, Miss	1	0	0
Eyre, F. H. D., Esq.	2	10	0
,, Rev. W. L. W.	1	5	0
Fairbairn, E. P., Esq., C.E.	1	1	0
Farrer, Rt. Hon. Lord	2	2	0
,, Sir W. J.	1	1	0
,, Oliver C., Esq.	1	0	0
,, Rev. Walter	1	1	0
Fenwick, T., Esq., C.E.	1	10	0
Ferard, C. A., Esq.	1	1	0
Field, Rogers, Esq., C.E.	3	19	0
,, Col.	1	10	0
Filgate, T. F., Esq.	1	0	0
Fisher, W., Esq.	1	0	0

	£	s.	d.
Fleming, T. R., Esq.	1	0	0
Forde, Rt. Hon. Colonel	2	10	0
Forsyth, J. N., Esq.	1	0	0
Foster, C. F., Esq.	1	1	0
,, Mrs.	1	3	0
,, R., Esq.	2	10	0
Fox, Rev. W. H.	2	0	0
Furlong, R. O'B., Esq.	1	0	0
Gale, J. M., Esq., C.E.	1	1	0
Gamlen, Miss	1	10	0
Garnett, W., Esq.	5	0	0
Garnons-Williams, Major	1	0	0
Garrett, Rev. H.	1	0	0
Gatty, Dr.	5	5	0
Goode, W., Esq.	1	1	0
Gosling, Colonel	1	0	0
Green, Lawrence, Esq.	1	5	6
Greg, A., Esq.	1	0	0
Griffith, W. D. W., Esq.	1	0	0
Grundy, R. A., Esq.	1	0	0
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Gunner, W. A., Esq.	1	1	0
Hall, J., Esq., C.E.	1	0	0
,, Percy C., Esq.	1	1	0
Hamersley, Cecil, Esq.	1	0	0
Hames, Miss	1	1	0
Hankinson, R. C., Esq.	1	1	0
Hare, Mrs. Marcus	1	0	0
,, Theodore J., Esq.	1	0	0
Harris, C. E., Esq.	1	11	0
Hartley, T. M., Esq.	1	0	0
Hayhurst, Colonel	1	1	0
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Haywood, T. B., Esq.	1	1	0
Heberden, W. B., Esq., C.B.	1	0	0
Helps, A. S., Esq.	1	0	0
Herbert, A. C., Esq.	1	12	0
Hesketh, R. L., Esq.	1	1	0
Hill, Arthur, Esq.	1	1	0
,, Messrs. G. H. & Sons	2	12	0
,, J. H., Esq.	2	0	0
,, T. A. Esq.	1	1	0
Hoare, Mrs.	1	0	0
Hodson, G., Esq., C.E.	1	11	6
Holmes, W. H., Esq.	1	0	0
Hopkins, W. R. Innes, Esq.	1	1	0
Hopkinson, J., Esq.	1	0	0
Horner, Mrs.	1	0	0
Horsfall, T. C., Esq.	1	11	0
Hoskins, Miss	1	0	0
Hounsom, W. A., Esq.	1	0	0
Howard, Lady Victoria	1	0	0
,, W. D., Esq.	10	15	0
Howlett, Rev. F.	1	1	0
Howson, J., Esq.	1	0	0
Hunter, J., Esq., C.E.	1	1	0
Hurnard, S. F., Esq.	4	6	0
Hurt, Albert F., Esq.	2	15	0
Hutchings, Rev. Canon	1	7	0
Hutton, T. O., Esq.	1	6	0
Ingram, Colonel	1	0	0
Iveagh, Rt. Hon. Lord	1	13	6
Jago, E., Esq.	1	2	6
Jenkin, S. W., Esq., C.E.	1	0	0
Jenkyns, Lady	1	0	0
Jersey, The Rt. Hon. the Earl of	1	0	0
Jones-Balme, F.M.T., Esq.	1	0	0
Jones, Mrs.	1	0	0
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,, W. J. Paley, Esq.	1	1	0
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,, F. J., Esq.	1	0	0
Moore, Dr. J. W.	1	0	0
Morrison, W., Esq., M.P.	2	0	0
Morton, The Countess D. of	1	1	0
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Newton, C. B., Esq., C.E.	1	0	0
Nicol, Dr.	1	1	0
Northwick, Lady	1	1	0
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,, H., Esq.	1	0	0
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ON THE MEAN ANNUAL RAINFALL IN THE ENGLISH LAKE DISTRICT.

In *British Rainfall*, 1895, we gave all the total yearly amounts of rain recorded at Seathwaite from 1845 to 1895, and the average, and showed the relative wetness and dryness of each year.

In *British Rainfall*, 1896, we gave all the total yearly amounts of rain recorded within an area of about $6\frac{1}{2}$ miles from S. to N. and $4\frac{1}{2}$ from E. to W. (say 30 square miles), having Seathwaite nearly in the centre.

We wish now to deal with an enormously larger area—about 650 square miles—and it becomes undesirable to *print* all the observations (it would take twenty or thirty pages), although of course we have had to tabulate them all (about 1600 yearly values) as the only mode of getting the true means, and so ascertaining the general distribution of the rainfall.

We must here call attention to a difficulty, and state the course which we have taken. We dislike reprinting, and therefore ask our readers to refer to page 18 of *British Rainfall*, 1896, before proceeding further. We there showed how the rainfall of a few years, even very wet or very dry ones, could be made to indicate the fall in an average year. Therein lies the difficulty of the present paper. It is not likely that the wetness or dryness of each year was equal over the whole of the large area with which we have now to deal. For this reason it would be better to have several standard stations and, to compute the deduced mean for each station from the nearest standard station; but this would complicate the work, and it is not at all certain that the difference between the standards might not lead to greater errors than does the use for the whole area of the Seathwaite ratios, which we have adopted.

It will be noticed that in the following table we have included the records for 1896, whereas in *British Rainfall*, 1895, the Seathwaite ratios could only be given down to 1895; we have of course determined the ratio for 1896, viz., 91

It will give some idea of the work needed for the preparation of such a paper as this, if we mention that records from 147 stations have been utilized, and that the aggregate number of yearly records dealt with has been 1,612—an average of eleven years for each station,—the Seathwaite record of 52 years being the longest, but followed by a 49 years record at Keswick, by two of 42 years (Coniston and Mirehouse, Basenthwaite), and by one of 41 years at Whinfell Hall.

We do not put forward the work as perfect, either as regards the observations or the calculations, but nearly all the observations appear correct, and we see no prospect of better ones being available for years to come; and as regards the extraction of the data and the calculations, much of both has been done in duplicate, and only one error (amounting to less than a tenth-of-an-inch at one station) has been detected, so that we trust that there is no fear of anything serious having escaped detection, or of the general conclusions hereinafter stated being materially modified by another half-century's work.

In the following tables the stations are given separately for each county, viz., Lancashire, Cumberland and Westmoreland, and in each county they follow very nearly in the usual order from south to north.

Having explained how the mean values given (for each station) in the last column have been arrived at, we have to add a few words of comment.

As will be explained further on, the mean rainfall given in the last column is also given upon an accompanying map, but in some instances the stations are so close one to another that the figures could not all be printed, and in all such cases it will be noted that the stations are bracketed together, and the mean of the group is stated; this is the case with entries 2 to 5 inclusive, and it will perhaps be wondered why the average is entered as 67 instead of 71, which is the average of the four entries. The answer is, that reference to the previous column will show that two of the values are based each on only one year's observations, whereas the others depend on nine and on ten years respectively; and in working out the mean, the greater import

of the longer period has been allowed for. Sometimes, but very rarely, other features have been recognised, of which one of the few instances occurs only two stations further on. Monk Coniston Park, and Gardens, the long-period record gives 75·9 in., the shorter period 87·4 in. According to the previous rule, the mean would be 80 inches, but we have given 83 inches, *because* the old gauge was, as is shown, nearly 5 ft. above the ground, and in a very exposed part of the park, so that, indisputably, it recorded too little; and, correcting for that, we obtain 83 in., which we are sure is nearer the truth than 80 in.

We may now turn to the maps. Of the orographical one we need say only that having seen it in Dr. Mill's very interesting paper on *The English Lakes*, we thought that we could not do better than, with his consent and that of his publishers, transfer it to our pages. Nothing could give a better idea of the distribution of High Lands in the Lake District, or tend more to facilitate the study of the rainfall map which faces it.

The rainfall map could not, as we have stated, contain every individual site upon which a rain gauge has been at work; but there are on it nearly 100 entries, each being the average depth of rain (in inches) which falls over the spot covered by the figures.

Moreover, we have drawn upon the map what are known as isohyetal lines, lines of equal mean annual rainfall, and we have adopted a plan which we have not noticed in any previous publication, viz., increased the thickness of the line for the greater amounts; thus the mean line of 40 inches in the N.E. corner of the map is not thicker than a hair —, whereas the line for 100 inches is quite thick ▬

As regards the course of these lines, they were drawn primarily from the whole of the mean values as plotted, but before being finally adopted, were in a few cases slightly modified. It may be well to point out some illustrative cases. Nearly two miles inside the Eastern portion of the 100 inch area will be seen Fairfield, with 85 inches, and away to the West will be seen Esk Hause with the same amount. The reason for not so curving the 100 in. line as to exclude these stations is, that both are very high and exposed positions, where the amount collected, though doubtless correct for those windy spots, does not represent the fall of the district surrounding them. The same is true of the 76 in. (Patterdale, Stang End), which will be seen sitting on the line of 90 inches! We saw that gauge in 1866, and doubtless the 76 in. truly represents what it collected, but it was

at 1,550 ft., among masses of rock, and the position more resembled the roof of a house than a level site for a rain gauge; and, therefore, though the 76 in. did not agree with our line, we did not feel called upon to move it.

Careful examination of the map will show that for some parts of the district there is still a great dearth of observations. By far the worst, is the area bounded by lines running N.W.–S.E. through Kirkstone Pass and through Mardale Green, and crossed at right angles by lines through Long Sleddale Parsonage and Martindale Parsonage respectively; this gives an area of 50 square miles in which no rain gauge has ever been placed. It will be rather strange if our lines across that area do not require modification whenever records are obtained from that locality.

A faint parallelogram will be seen surrounding Seathwaite; it indicates approximately the area dealt with in *British Rainfall*, 1896, and of which the particulars will, therefore, *not* be found in this year's tables, nor is there room on the map for the results for all the stations given on the large scale map in our last volume.

Rather more than thirty years ago (on Feb. 14th, 1867) one of us gave evidence before the Royal Commission which, under the chairmanship of the Duke of Richmond, was considering the supply of London with water from the English Lakes. We have been reading that evidence, and upon the whole the values then assigned (on a totally different basis) to such of the stations in the preceding tables as were then in existence, agree somewhat remarkably with those now obtained.

Station.	Mean as computed in 1867. in.		1898. in.
Hallsteads	52	...	53
Watermillock	55	...	53
Keswick, Derwent I.	57	...	55
,, Crow Park.	51	...	49
Mire House	50	...	50
Lowbridge House	73	...	72
Low Nook	75	..	73
Lesketh Howe	78	...	80

Station.	Mean as computed in 1867. in.		1898. in.
Grasmere, High Close.	77	...	81
,, Parsonage.	106	...	105
,, Lancregg...	94	...	97
Patterdale	75	...	81
Lowther Castle	44	...	41
Eusemere Hill	43	...	39
Tirril	39	...	38

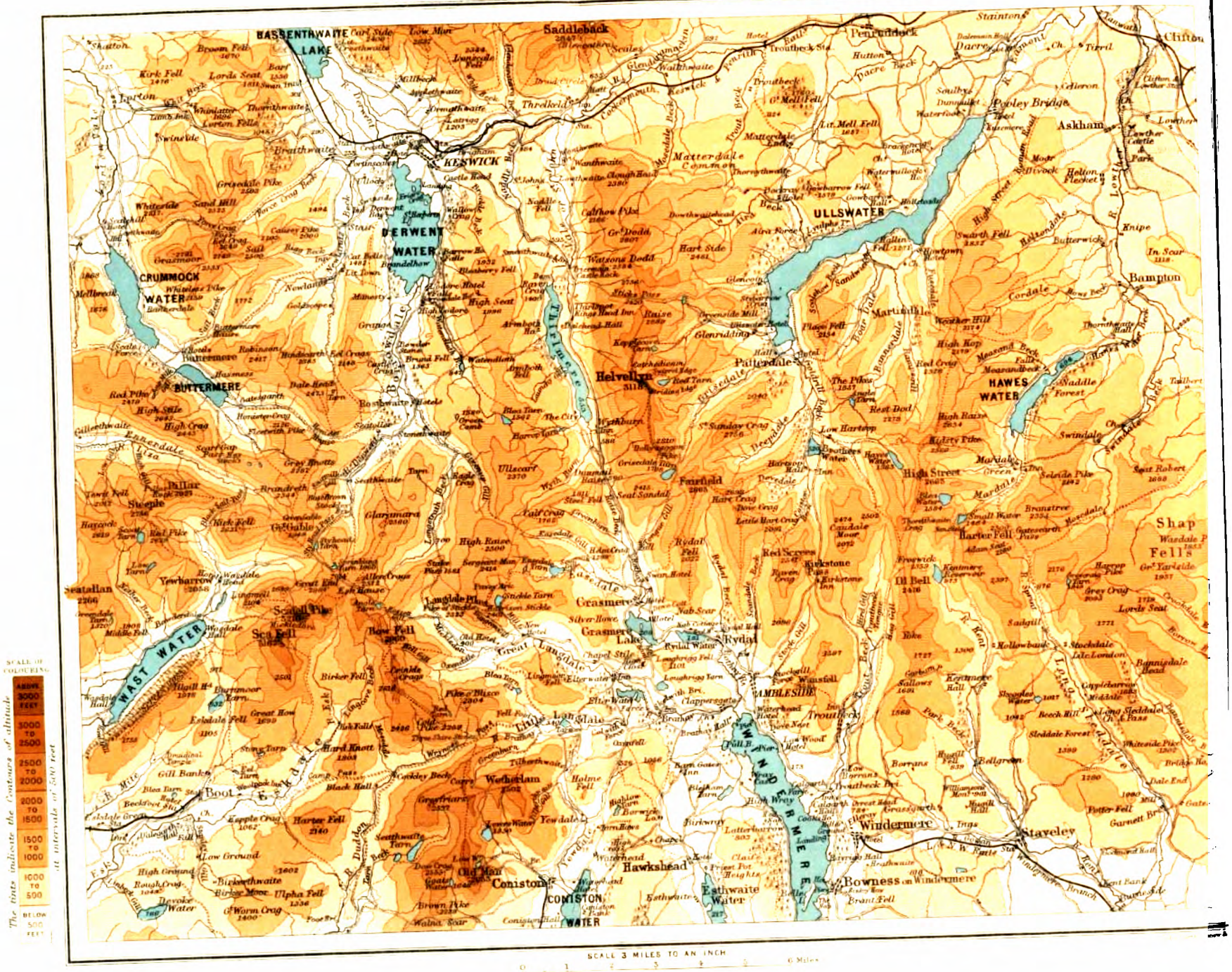
There are therefore—

1 difference of 6 inches.
2 differences ,, 4 ,,
2 ,, ,, 3 ,,
5 differences of 2 inches.
4 ,, ,, 1 inch.
1 absolute identity.

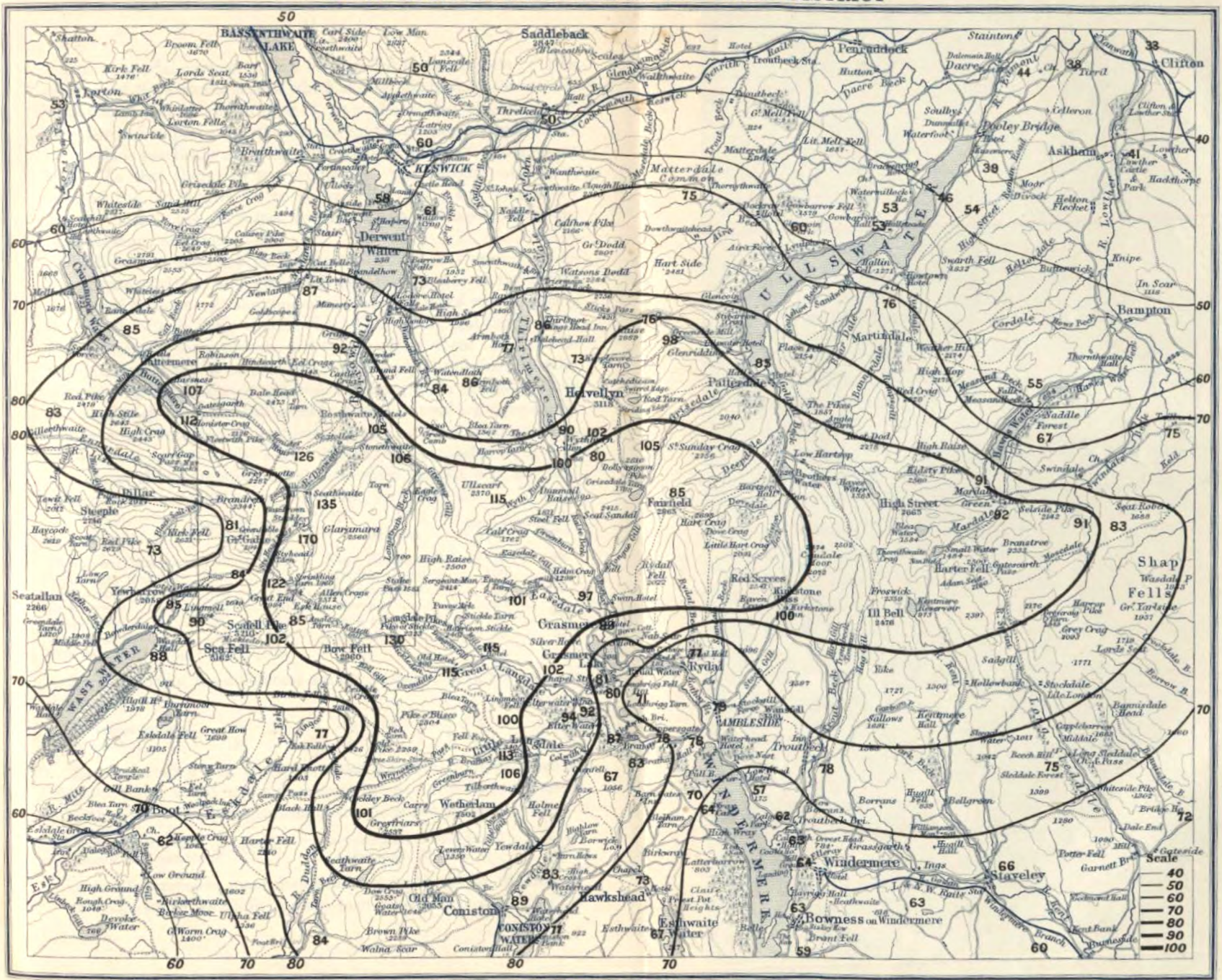
and if the average of the whole be taken, the means are—

1867 = 64·6 inches. 1898 = 64·5 inches. Difference = 0·1 inch.

OROGRAPHICAL MAP OF THE LAKE DISTRICT


BASSENTHWAITE LAKE
KESWICK
DERWENT WATER
BORROWDALE
CRUMMOCK WATER
BUTTERMERE
ENNERDALE
LOWESWATER
WAST WATER
ULLSWATER
HAWES WATER
Saddleback
Penrith
Penruddock
Pooley Bridge
Askham
Bampton
Shap
Shap Fells
Helvellyn
Fairfield
Grasmere
Grasmere Lake
Rydal
Rydal Water
Langdale
Great Langdale
Little Langdale
Coniston
CONISTON WATER
Hawkshead
Esthwaite Water
Windermere
Bowness on Windermere
Staveley
Ambleside
Troutbeck
Patterdale
Martindale
Kirkstone
Red Screes
High Street
Harter Fell
Ill Bell
Caudale Moor
Scafell Pike
Scafell
Great Gable
Pillar
Steeple
Yewbarrow
Seatallan
Kentmere
Longsleddale
Mardale
Swindale
Wasdale
Eskdale
Boot
Ravenglass
Whitehaven
Cockermouth
Workington
Maryport
Keswick
Borrowdale
Derwentwater
Thirlmere
Ullswater
Windermere
Morecambe Bay
Duddon Estuary
Irton
Wasdale Head
Seathwaite
Langdale Pikes
Bowfell
Crinkle Crags
Pike o' Blisco
Wetherlam
Old Man
Dow Crag
Coniston Old Man
Brown Pike
Walna Scar
Harter Fell
Hard Knott
Eskdale Fell
Muncaster Fell
Black Combe
Whitecombe
Ennerdale Water
Crummock Water
Buttermere
Loweswater
Melbreak
Grasmoor
Whiteless Pike
Robinson
Hindscarth
Dale Head
Red Pike
High Stile
High Crag
Haystacks
Gamlin End
Grey Knotts
Brandreth
Great Gable
Green Gable
Base Brown
Kirk Fell
Pillar Rock
Lord's Seat
Barf
Broom Fell
Whinlatter
Thornthwaite
Lorton Vale
Swinside
Braithwaite
Grisedale Pike
Whitestone
Sand Hill
Causey Pike
Grasmoor
Whiteless Pike
Scale Force
Rannerdale Knotts
Fleetwith Pike
Honister Crag
Gillercombe Head
Scarth Gap
Gatesgarth
Buttermere House
Robinson
Hindscarth
Dale Head
Newlands
Goldscope
Minorty
Grange
Castle Crag
Bull Crag
Watendlath
Lodore Hotel
Lodore Falls
Shepherd's Crag
Walla Crag
Ashness
Barrow House
Castle Head
Portinscale
Derwent Bay
Skiddaw
Skiddaw Little Man
Skiddaw House
Bakestall
Carl Side
Low Man
Longside Edge
Millbeck
Applethwaite
Dodd
Latrigg
Threlkeld
Blencathra
Saddleback
Scales
Glenderaterra Beck
Gale Fell
Mungrisdale
Mosedale
Matterdale Common
Matterdale End
Dockray
Aira Force
Gowbarrow Fell
Lyulph's Tower
Gowbarrow Park
Watermillock
Hallin Fell
Howtown
Martindale
Place Fell
Boardale Hill
Boredale Hause
Angle Tarn
Hartsop
Hartsop Hall
Brothers Water
Hayeswater
Kidsty Pike
Rest Dodd
The Nab
Low Hartsop Dodd
High Hartsop Dodd
Gray Crag
Thornthwaite Crag
Froswick
Ill Bell
Yoke
Caudale Moor
Red Screes
Kirkstone Pass
Kirkstone Inn
Kentmere Reservoir
Harter Fell
Gatescarth Pass
Branstree
Small Water
Mardale Green
Selside Pike
Seat Robert
Swindale Head
Wasdale Fells
Great Yarlside
Lord's Seat
Grey Crag
Harrop Pike
Gatescarth Pass
Sadgill
Hollowback
Stockdale
Bannisdale Head
Gappleharrow
Middle Fell
Long Sleddale
Sleddale Forest
Whiteside Pike
Bellgreen
Borrans
Low Borrans
Troutbeck Park
Troutbeck
Ambleside
Skelghyll Wood
Loughrigg Fell
Loughrigg Tarn
Rydal Mount
Rydal Hall
Nab Cottage
Nab Scar
Silver Howe
Grasmere
Grasmere Lake
Lake Hotel
Swan Hotel
Stickle Tarn
Pavey Ark
Harrison Stickle
Thunacar Knott
Sergeant Man
Codale Head
Blea Tarn
Lingmoor
Side Pike
Lingmoor Fell
Great Langdale
Chapel Stile
Elterwater
Elter Water
Baysbrown
Wall End
Oxendale
Mickleden
Pike o' Stickle
Rossett Gill
Bowfell
Esk Pike
Crinkle Crags
Shelter Crags
Long Top
Cold Pike
Pike o' Blisco
Wetherlam
Swirl How
Prison Band
Grey Friars
Tilberthwaite
Tarn Hows
Yewdale
Coniston
Coniston Hall
Coniston Water
Brantwood
Torver
Torver Common
Holme Fell
Blawith
Woodland
Water Head
Hawkshead
Hawkshead Hall
Esthwaite Water
Esthwaite
Belle Isle
Bowness on Windermere
Windermere
Lake Windermere
Low Wood Hotel
Waterhead Hotel
Ambleside
Skelghyll Wood
Troutbeck
Troutbeck Park
Troutbeck Tongue
Applethwaite
Underfell
Kirkstone Pass
Kirkstone Inn
Red Screes
Caudale Moor
Ill Bell
Froswick
Yoke
Thornthwaite Crag
Gray Crag
Harter Fell
Gatescarth Pass
Mardale Ill Bell
Nan Bield Pass
Mardale Head
Riggindale
Rough Crag
Kidsty Pike
Rest Dodd
The Nab
Low Hartsop Dodd
High Hartsop Dodd
Hartsop
Hartsop Hall
Brothers Water
Hayeswater
Gill
Hayeswater Gill
Pasture Beck
Goldrill Beck
Boredale Hause
Angle Tarn
Patterdale
Glenridding
Glenridding Hall
Glenridding Beck
Keppel Cove
Keppel Cove Tarn
Helvellyn
Lower Man
Nethermost Pike
Dollywaggon Pike
Striding Edge
Red Tarn
Swirral Edge
Catstycam
Whiteside
Raise
Stybarrow Crag
Stybarrow Dodd
Watson's Dodd
Great Dodd
Clough Head
Calfhow Pike
Naddle Fell
Naddle Forest

MEAN ANNUAL RAINFALL IN THE LAKE DISTRICT



This wonderful agreement may be regarded in two aspects: (1) as evidence of the accurate results which can be obtained by the careful reduction of rainfall records; or (2) as evidence that the labour we have devoted to preparing this article has been wasted, inasmuch as the result is practically identical with what we obtained thirty years back. To that there are two replies: (*a*) that nobody would have believed the old figures to be so near the truth; and (*b*) that we have not merely the old values confirmed, but also records from six times as many additional ones.

We have, however, not yet finished with that 1867 evidence. In the autumn of 1866, we erected thirteen rain gauges at the undermentioned stations. At the time of the enquiry there were available the records of only three months (Oct.–Dec., 1866), and the problem was to interpret those records, and to infer from them the probable yearly mean rainfall at each station; the difficulty being exceptionally increased, by there being no old-established station in the eastern part of the district, of which the records could be used for comparison. We have now records for more than 30 years for some of the stations, and it is not easy to devise a more severe test for rainfall work than to compare the assumptions based upon three months, with the facts accumulated during 30 years. However, here they are:—

Station.	Mean as computed in 1867. in.		1898. in.
Wythburn Parsonage.	90	...	97
Helvellyn, Birkside ...	81	...	102
Watendlath	82	...	83
Gowbarrow	72	...	60
Matterdale.....	80	...	81
Kirkstone Pass.....	82	...	100
Easedale Tarn	100	...	101

Station.	Mean as computed in 1867. in.		1898. in.
Shap, Sleddale Hall...	113	...	88
Mardale Green	108	...	92
Measandbecks	52	...	55
Greenside	93	...	98
Stang End	67	...	76
Swarthfell	53	...	53

Here, of course, the differences are far greater than in the previous comparison.

Differences (inches)...	25	21	18	16	12	9	7	5	3	1	0
Instances	1	1	1	1	1	1	1	1	1	3	1

The mean error was, therefore, about 9 inches, or 10 per cent. of the total; and, as the errors were some in one direction and some in the other, we have the curious result for the whole thirteen stations—

Computation in 1867 based on 3 months = 82·5 in. Computation in 1898 from subsequent 30 years ... = 83·3 in.

Now a few remarks upon the features brought out by the Map. One fact which we think has not been generally recognised is the

large area with a fall of 100 inches or upwards. Far to the east as our isohyetal of 100 inches goes, we think that it is quite likely that gauges in the neighbourhood of Kentmere Reservoir, Blea Water and Kidsty Pike would prove that it ought to extend still further east. But as it is, it shows that falls exceeding 100 inches occur over more than 70 square miles.

Another fact, which will be a surprise to many meteorologists, is the great rainfall which Mr. S. A. Marshall's gauges prove to exist at the head of the Langdales. Mickleden gives the extremely high mean of 129·7 inches, or within five inches of that at Seathwaite, in Borrowdale; and as it is thoroughly supported by the other gauges in Langdale, there is apparently not much difference between Langdale and Borrowdale.

Probably few persons realize how very greatly the rainfall differs even within a few miles. We have taken three pairs of stations—Mosedale and The Stye, Eskdale and Mickleden, and Great Gable and the Stye—separated by $3\frac{1}{2}$, $2\frac{1}{2}$ and $1\frac{1}{4}$ miles respectively, and we find the increase *per mile* to be 28 inches, 21 inches and 71 inches respectively—this last representing 0·04 inch per yard!

AVERAGE RAINFALL IN THE LAKE DISTRICT.

STATIONS.	AUTHORITIES.	Rain Gauge.			Observations.		Computed Mean Rainfall.	
		Diameter.	Height above Ground.	Height above Sea Level.	Limiting Dates.	Perfect Years.		
LANCASHIRE.			ft. in.	feet.			inches.	
Duddon (Seathwaite Vic.)	Rev. S. R. M. Walker	5	1 0	350	1889-96	8	84·1	
Hawkshead (Esthwaite, Strickland Ease)	T. A. Beck, Esq.	...	...	254	1845	1	79·2	
,, (,, ,, ,,).	Major Alcock Beck	5	3 6	254	1887-96	9	61·8	67
,, (,, Lodge)	T. A. Beck, Esq.	...	...	232	1845	1	71·6	
,, (,, ,,)	Major Alcock Beck	5	3 6	232	1887-96	10	70·2	
Coniston (Lane Head)	Mrs. Bywater	5	1 0	287	1865-76	10	76·5	
,, Parsonage	Rev. C. Chapman	5	1 0	205	1873-75	3	89·2	
Monk Coniston Park	V. Marshall, Esq.	10	4 11	150	1845-86	42	75·9	83
,, ,, Gardens	,, ,, ,,	5	1 0	305	1874-96	23	87·4	
Hawkshead	W. Lane, Esq.	5	1 2	280	1873-83	11	72·8	
,, (Highfield)	W. H. Heelis, Esq.	5	1 0	460	1874	1	76·7	73
,, (Belmont)	C. F. Wordsworth, Esq.	5	1 0	316	1870	1	66·9	
Wray Castle	Dr. Dawson	8	4 9	250	1850-65	16	63·7	
Low Wray	Rev. W. R. Morris	5	1 0	220	1873-77	5	69·7	
Hawkshead (Black Fell)	S. A. Marshall, Esq.	5	1 6	1055	1890-96	7	66·5	
Duddon Valley (Cockley Beck)	G. J. Symons, Esq., F.R.S.	5	1 0	720	1889	1	101·0	
Little Langdale (Bridgend)	E. B. W. Balme, Esq.	8	0 9	385	1872-81	10	106·1	
Skelwith Fold [Ambleside]	S. A. Marshall, Esq.	5	1 0	333	1890-96	7	83·2	83
,, ,, [,,] ..... *M*	,, ,, ,,	5	1 0	333	1890-96	7	82·5	
Brathay Hall [,,]	G. Redmayne, Esq.	5	1 6	150	1873-81	9	78·1	
CUMBERLAND.								
Eskdale Foot	Dr. Miller, F.R.S.	...	...	150	1847-49	3	62·4	
,, Vicarage	Rev. R. H. Snape	5	1 6	130?	1889-96	8	69·7	
,, Head	Dr. Miller, F.R.S.	...	...	1570	1847-53	7	77·2	
Wastdale Head	G. J. Symons, Esq., F.R.S.	4	0 6	247	1877-96	20	88·3	

AVERAGE RAINFALL IN THE LAKE DISTRICT—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge.			Observations.		Computed Mean Rainfall.	
		Diameter.	Height above Ground.	Height above Sea Level.	Limiting Dates.	Perfect Years.		
CUMBERLAND—(*con.*)			ft. in.	feet.			inches.	
Wastdale Head	Dr. Miller, F.R.S.	...	...	247	1845-53	9	101·3	
,, ,,	I. Fletcher, Esq., M.P., F.R.S.	4	0 6	247	1864-69	6	87·1	95
,, ,,	,, ,, ,,	4	0 6	247	1872	1	78·7	
Mosedale	,, ,, ,,	4	0 6	624	1865-66	2	73·3	
Ullscarf	G. H. Hill, Esq., C.E.	7	1 0	2100	1878-96	19	115·1	
Wythburn Parsonage	Rev. B. Lawson	8	1 0	574	1867-80	14	96·5	
,, ,,	,, ,, ,,	5	1 0	574	1879-91	13	103·6	100
Helvellyn (Birkside)	G. H. Hill, Esq., C.E.	7	1 0	1900	1878-96	19	79·6	
,, ,,	G. J. Symons, Esq., F.R.S.	8	1 0	1800	1867-79	12	102·4	
Wythburn	G. H. Hill, Esq., C.E.	7	1 0	585	1878-96	19	89·5	
Ennerdale (Gillerthwaite)	Dr. Miller, F.R.S.	...	...	396	1847-51	5	83·1	
Buttermere (Gatesgarth)	,, ,, ,,	...	...	290	1845-53	9	112·1	
,, (Hassness)	Mr. S. Stewart	5	1 0	330	1887-96	10	107·2	
Watendlath	G. J. Symons, Esq., F.R.S.	8	1 0	867	1867-88	22	83·2	
,,	,, ,, ,,	5	1 0	867	1887-88	2	90·3	84
Armboth Fells (The Pewitts)	G. H. Hill, Esq., C.E.	7	1 0	1655	1878-96	19	85·9	
Helvellyn (Whiteside)	,, ,, ,,	7	1 0	2100	1878-96	19	72·9	
Armboth	,, ,, ,,	7	1 0	550	1878-93	16	76·8	
Thirlmere (Dale Head Hall)	,, ,, ,,	7	1 0	620	1894-96	3	86·1	
Borrowdale (Grange)	Mr. Threlkeld	5	0 9	271	1887-96	10	91·8	
Crummock Lake	Dr. Miller, F.R.S.	...	...	260	1845-53	9	84·7	
Newland Vicarage	Rev. R. Armstrong	5	1 0	540	1888	1	87·3	
Derwentwater (Barrow House)	Miss E. G. Langton	8	0 6	282	1867-96	29	72·9	
Ullswater (Hallsteads)	S. A. Marshall, Esq.	10	4 0	334	1845-86	37	53·2	
,, (,,)	,, ,, ,,	5	2 0	497	1887-96	10	52·8	53
Gowbarrow Fell	G. J. Symons, Esq., F.R.S.	8	1 0	1100	1867-76	10	60·2	
Loweswater (Godferhead)	A. H. Smith, Esq.	5	0 10	360	1881-82	2	60·1	

Matterdale Fell	G. J. Symons, Esq., F.R.S.	8	1 0	1400	1867-70	4	80·7	75
,, Common	,, ,, ,,	...	...	...	1874-76	3	59·6	
Watermillock	Mr. W. Rumney	10	3 6	720	1860-73	14	53·4	
Keswick (Deer Close)	J. Marshall, Esq.	7	1 9	300	1870-96	26	61·3	
,, (Derwent Island) *O.G.*	,, ,, ,,	5	1 0	280	1865-96	32	54·6	58
,, (,, ,,) *N.G.*	,, ,, ,,	5	0 7	290	1884-96	13	59·4	
,, (Crow Park)	H. C. Marshall, Esq.	10	4 0	295	1863-71	9	48·7	
,, (,, ,,)	,, ,, ,,	7	1 9	280	1865-69	4	54·7	
,, (Brow Top)	Mr. J. Barker	5	0 8	407	1868-75	8	58·7	
,, (Eskin Place)	J. Postlethwaite, Esq.	8	6 4	298	1894-96	3	63·6	
,, (Shu-le-crow)	A. M. Dawson, Esq.	12	3 0	300	1873-89	17	58·9	
,, (,,)	,, ,, ,,	5	0 7	296	1890-96	7	64·3	60
,, (Post Office)	J. F. Crosthwaite, Esq.	8	6 6	270	1845-93	49	59·4	
,, (,, ,,)	,, ,, ,,	5	1 0	270	1866-96	31	59·1	
,, (The Beeches)	T. Paulin, Esq.	5	1 0	396	1890-95	5	64·6	
,, (,, ,,)	,, ,, ,,	8	1 0	396	1890	1	64·3	
,, (Greta Bank)	J. J. Spedding, Esq.	...	0 6	380	1864-69	5	55·7	
Threlkeld Rectory	Rev. J. Brunskill	5	4 0	488	1884-92	9	49·9	
Cockermouth (Whinfell Hall)	W. Robinson, Esq.	5	2 0	265	1856-96	41	53·1	
Keswick (Skiddaw)	Mr. G. Nixon	8	1 0	1677	1867-74	8	51·6	50
,, (Whitbeck)	,, ,,	8	1 0	1677	1874	1	46·5	
Bassenthwaite (Mire House)	Lady J. Spedding	5	0 6	300	1854-96	42	49·9	
WESTMORELAND.								
Kendal (Ellergreen)	J. Cropper, Esq.	5	1 6	270	1887-96	9	59·9	
Bowness (Belsfield)	H. W. Schneider, Esq.	5	4 0	160	1871-80	4	58·5	
,, (Fallbarrow)	H. E. Rawson, Esq.	8	1 0	135	1883-96	14	62·8	
,, (Matson's Ground)	G. Healey, Esq.	12	0 8	480?	1868-82	15	64·3	64
,, (The Craig)	Sir T. S. Pasley, Bt.	8	2 0	240	1847-52	6	63·3	
Staveley (Reston Hall)	T. K. Atkinson, Esq.	10	3 0	...	1865-77	13	63·1	
,,	I. B. Godfrey, Esq.	5	1 0	320	1878-79	2	66·1	
Windermere (Woodland Terrace)	Rev. T. Mackereth	5	6 6	376	1889-95	7	58·9	
,, (Hazelthwaite)	C. Somervell, Esq.	8	1 0	330	1879	1	66·7	63
,, (High House)	E. Hayton, Esq.	8	3 0	636	1866-73	8	54·0	
,, (The Wood)	G. B. Crewdson, Esq.	8	3 2	322	1865-82	18	68·1	

AVERAGE RAINFALL IN THE LAKE DISTRICT—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge.			Observations.		Computed Mean Rainfall.	
		Diameter.	Height above Ground.	Height above Sea Level.	Limiting Dates.	Perfect Years.		
WESTMORELAND—(*con.*)			ft. in.	feet.			inches.	
Windermere (Ibbotsholm)	S. Taylor, Esq.	8	3 0	180	1865-67	3	60·4	62
,, (Holehird)	R. M. Dunlop, Esq.	8	1 0	425	1875-78	3	63·6	
Selside (Lowbridge House)	...	...	...	736	1850-54	5	72·4	
Windermere (The Briary)	E. Fothergill, Esq	12	6 0	...	1866-67	2	57·1	
Troutbeck (The Howe)	Admiral Wilson	8	1 2	470	1845-70	26	77·6	
Longsleddale	Rev. W. Burrows	5	1 0	512	1887-96	10	74·6	
Little Langdale (Fell Foot)	S. A. Marshall, Esq.	5	2 2	380	1890-96	7	112·8	
Ambleside (Skelwith Bridge)	A. J. Adams, Esq.	5	1 8	190	1891-96	6	86·7	
Brathay Vicarage	Rev. H. S. Callender	5	1 3	150	1873-85	12	78·2	
Elterwater (Birch Hill)	Capt. Robinson	5	1 1	243	1890-96	7	93·8	
,, (Lingmoor)	E. Tucker, Esq.	8	1 0	1485	1882-85	4	99·5	
,, (Woodlands)	,, ,, ,,	5	0 9	244	1872-85	14	92·0	
,, (Bottom of Loughrigg)	E. B. W. Balme, Esq.	8	1 0	200	1867-68	2	80·2	
Ambleside (Nook Cottage)	Mr. E. Hird	5	1 0	229	1875-93	19	77·8	79
,, (The Nurseries)	Mr. J. Grier	5	1 2	140	1869-71	3	76·5	
,, (Low Nook)	J. C. Wilson, Esq.	5	1 0	150	1860-68	9	73·1	
,, (,, ,,)	Rev. S. Joy	5	1 0	150	1870-72	3	81·4	
,, (Lesketh Howe)	Dr. Davy, F.R.S.	6	2 0	170	1848-67	20	80·1	
,, (,, ,,)	F. M. T. Jones, Esq.	5	2 6	175	1870-96	27	82·6	
Loughrigg Top	E. B. W. Balme, Esq.	8	1 0	1050	1867-71	5	71·0	
Grasmere (High Close)	,, ,, ,,	8	0 9	553	1858-96	38	80·6	
Great Langdale (Brigg House)	E. Tucker, Esq.	5	0 9	320	1869-70	2	101·8	
Langdale (Middlefell Place)	Dr. Miller, F.R.S.	...	...	250	1845-52	8	118·4	115
,, (,,)	E. B. W. Balme, Esq.	8	1 0	380	1867-69	3	105·1	
Dungeon Ghyll	S. A. Marshall, Esq.	5	1 7	311	1890-96	7	114·3	115
,, ,,	,, ,, ,,	5	0 5	310	1890-96	7	116·1	

Mickleden	S. A. Marshall, Esq.	5	1 6	490	1890-96	7	129·7	
Rydal	F. M. T. Jones, Esq.	5	1 6	185	1866-69	4	77·2	
Grasmere (Pavement End)	T. A. Green, Esq.	5	1 0	214	1884-96	13	87·4	
,, Parsonage		...	...	180	1845-47	3	105·1	89
,,	J. S. Green, Esq.	...	1 0	240	1862	1	70·4	
Kirkstone Pass	G. J. Symons, Esq., F.R.S.	5	1 0	1500	1869-87	13	100·4	100
,, ,,	,, ,, ,,	8	1 0	1500	1867	1	84·9	
Grasmere (Lancregg)	Sir J. Richardson	...	4 6	300	1860-61	2	96·6	
Easedale Tarn	G. J. Symons, Esq., F.R.S.	8	1 0	1175	1867-78	12	101·0	
Fairfield	T. A. Green, Esq.	5	1 0	2860	1891-96	6	84·5	85
,,	,, ,, ,,	8	1 0	2860	1890-96	7	86·2	
Shap (Sleddale Hall)	G. J. Symons, Esq., F.R.S	8	1 0	1500	1867-72	5	88·1	83
,, (,, ,,)	Mr. W. Hoggarth	5	1 0	1560	1881-90	10	78·6	
,, (Swindale)	,, ,, ,,	5	1 0	1610	1881-90	10	90·9	
Haweswater (Mardale Green)	G. J. Symons, Esq., F.R.S.	8	1 0	800	1867-87	19	91·8	
,, (,, ,,)	,, ,, ,,	5	1 0	780	1881-88	8	102·7	92
,, (,, ,,)	,, ,, ,,	5	1 0	...	1892	1	73·2	
,, (,, Chapel Hill)	H. P. Holme, Esq.	5	1 0	747	1881-83	3	90·9	
Patterdale (Ruthwaite Lodge, Grisedale)	Mr. A. Milne	8	1 6	1750	1889-96	8	104·8	
Haweswater (Naddle Forest)	G. J. Symons, Esq., F.R.S.	8	1 0	794	1886-87	2	66·9	
Shap (Tailbert Beck)	Mr. W. Hoggarth	5	1 0	900	1881-85	5	75·1	
Haweswater (Measandbeck)	G. J. Symons, Esq., F.R.S.	8	1 0	861	1867-82	16	55·1	
Patterdale Hall	W. Marshall, Esq.	10	5 0	495	1860-63	4	80·5	85
,, ,,	Mr. A. Milne	7	1 3	490	1864-96	32	85·7	
,, (Greenside Mine)	T. Taylor, Esq.	7	1 6	1000	1872-96	24	97·7	
,, (Stang End)	Mr. J. Barningham	7	1 6	1550	1866	1	76·0	
Ullswater (Martindale)	Rev. S. Golding	...	...	...	1868-75	8	75·9	
,, (Swarthfell)	G. J. Symons, Esq., F.R.S.	8	1 0	1000	1867-89	22	53·2	54
,, (,,)	,, ,, ,,	5	1 3	1000	1888-96	9	54·4	
,, (Sharrow Bay)	A. Parkin, Esq.	8	1 6	500	1867-87	20	43·8	46
,, (,, ,,)	,, ,, ,,	5	0 7	500	1869-87	19	48·3	
Lowther Castle [Penrith]	Mr. F. Clark	8	3 6	750	1874-96	22	40·8	
Pooley Bridge (Eusemere Hill)	Mrs. Angus	...	3 0	...	1863	1	39·1	
Barton Hall [Penrith]	J. H. Crumpston, Esq.	5	...	...	1887-91	5	43·8	
Tirril [Penrith]		...	...	...	1845	1	38·4	
Brougham Hall [Penrith]	Mr. A. Lodge	5	5 7	470	1851-85	33	33·2	

RECORDS OF EVAPORATION.

As intimated in our last volume, we this year give only the monthly totals of evaporation for 1897, not as in former years the amounts for each individual day; on the other hand, we are very glad to be able to give as an appendix to this section an epitome of the observations upon the subject carried out by Mr. Baldwin Latham, C.E., from 1888 to 1897 inclusive.

Notes upon the Stations.

CAMDEN SQUARE.—Everything exactly as described in previous years. We add below the complete monthly summary, as it will be useful for reference.

ISFIELD PLACE, SUSSEX.—No change in mode of observing; but a faulty measuring glass, supplied with the rain gauge used for comparison with the tank readings, has necessitated the correction of some of the figures given on page 31 of *British Rainfall*, 1896; the corrected values are given on the next page.

SOUTHAMPTON WATER WORKS.—No change.

TORQUAY WATER WORKS, KENNICK.—No change.

Evaporation at Camden Square, 1885—97.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
1885.	·20	·38	·86	1·71	1·98	2·77	3·29	2·25	1·13	·77	·17	·11	15·62
1886.	·23	·13	·53	1·59	1·78	2·93	3·12	1·86	1·46	·63	·27	·12	14·65
1887.	+·07	·29	·76	1·72	1·79	3·68	3·76	2·54	1·25	·78	·21	·07	16·78
1888.	·07	·37	·48	1·16	2·71	2·24	1·44	1·90	1·17	·60	·43	·03	12 60
1889.	·03	·18	·62	1·07	1·76	2·97	2·34	1·96	1·52	·42	·29	+·13	13·03
1890.	·08	·19	·50	1·44	2·63	2·14	2·33	2·02	1·27	·79	·31	*·04*	13·74
1891.	*·03*	·16	·73	1·35	1·66	2·83	2·34	1·67	1·00	·62	·20	*·22*	12·81
1892.	·05	·09	·60	1·88	2·65	3·05	2·84	2·20	1·01	·36	·02	*·20*	14·95
1893.	+*·03*	·01	·92	2·33	3·06	3·62	3·12	2·85	1·48	·70	·11	·01	18·18
1894.	+·04	·28	·83	1·17	2·10	2·48	2·49	1·91	·97	·37	·20	·11	12·87
1895.	·14	·64	·36	1·26	3·06	3·31	3·07	2·12	1·27	·54	·19	·07	16·03
1896.	·16	·24	·64	1·57	3·06	3·21	3·63	1·96	·68	·47	·18	·00	15·80
Mean	·07	·25	·65	1·52	2·35	2·94	2·81	2·10	1·18	·59	·22	·07	14·75
1897.	·23	·21	·76	1·23	2·99	2·48	3·60	2·49	·99	·63	·26	+·14	15·73
Diff.	+·16	—·04	+·11	—·29	+·64	—·46	+·79	+·39	—·19	+·04	+·04	—·21	+·98

Max. on any one day 0·23 in., on the 21st of June, 1887.

New Stations.

In our last, we pointed out the importance of ascertaining whether the results obtained at stations in the South of England were applicable to localities in the North; we are glad to say that the Engineers of two important Lancashire towns have taken the matter in hand, viz., for Bolton, Mr. R. H. Swindlehurst, C.E., and for Heywood, Mr. J. Diggle, C.E.; we hope next year to be able to give reports from both. It remains only to give the summary for the several stations for 1897; of course, the 5 inch record at Croydon is inserted merely as a warning what to avoid.

EVAPORATION IN 1897.

County ...	London	Surrey		Sussex	Hampshire	Devon.
Station ...	Camden Sq.	Duppas Hill, Croydon		Isfield Place	Otterbourne	Kennick, Christow
Latitude ...	51° 32′ 30″ N.	51° 22′ 5″ N.		50° 56′ 50″ N.	51° 0′ 28″ N.	50° 38′ 30″ N.
Longitude.	0 8 0 W.	0 6 13 W.		0 3 40 E.	1 19 55 W.	3 41 20 W.
Altitude ...	111 ft.	158 ft.		50 ft.	111 ft.	842 ft.
Observer...	G. J. Symons	Baldwin Latham, CE		Major King	W. Matthews, CE	W. Ingham, CE
Area of tank	6 ft. × 6 ft.	1ft. dia.	5in. dia.	4 ft. × 4 ft.	6 ft. × 6 ft.	6 ft. × 6 ft.
Capacity (galls.)	450	5	1	200	450	450
Height of lip above ground	3 inches	4 in.	5 ft.	1 inch	3 inches	3 inches
	in.	in.	in.	in.	in.	in.
January ...	·23	·05	*·18*	—	+·23	·27
February..	·21	·23	*·90*	—	·22	·26
March.....	·76	·92	*2·06*	1·13	·86	1·20
April	1·23	1·56	*2·82*	1·60	1·64	1·48
May.....	2·99	3·01	*5·36*	3·36	3·48	3·59
June	2·48	2·61	*4·91*	3·02	3·30	3·66
July	3·60	3·24	*6·08*	4·19	3·71	4·22
August ...	2·49	2·67	*4·55*	3·17	2·96	2·66
September	·99	1·45	*2·19*	1·69	1·60	1·51
October ...	·63	·76	*1·21*	1·20	1·08	·86
November.	·26	·36	*·62*	·43	·49	·31
December.	+·14	·07	*·50*	·11	+·02	·02
Year	15·73	16·93	*31·38*	(19·90)	19·09	20·04

Mr. BALDWIN LATHAM'S EXPERIMENTS.

In the *Quarterly Journal of the Royal Meteorological Society*, Vol. XVIII., page 53, will be found the Presidential Address delivered to the Society by Mr. Baldwin Latham, in which he gave full details of the observations upon evaporation made by him at Croydon between 1879 and 1891. He has now favoured us with the series of tables for the ten years 1888–97 which follow this note.

We must in the first place describe the apparatus employed. Mr. Latham has, of course, a full set of meteorological instruments, including the self-recording rain gauge already mentioned in our previous volumes, but we have here to deal merely with the evaporators. The principal one is illustrated by our frontispiece, and needs little further description. The water, the evaporation from which is to be measured, is that in the inner 12-inch floating cylinder, which is moored in the centre of the bason, and the daily loss (or gain) is determined by a hook gauge with vernier.

The instruments have twice been moved a short distance. Previous to October, 1889, they were at Park Hill Rise, 259 ft. above the Ordnance Datum; thence to the end of 1892, at Havelock Road, 205 ft. above O.D.; and since that time at Duppas House, at 158 ft. above O.D. All the stations are in Croydon and within a mile each of the others, we have, therefore, treated them as one record; but the ratio of the floating-tank to the 5 inch exposed one is not constant, and we think that the explanation is, that during 1890–2 the tank was less sheltered than the rain gauge, and therefore the fall of rain shown by the rain gauge did not accurately represent the amount falling into the tank. The figures as they stand give for the floating-tank a mean of 17·32 inches, and deducting (as is usually done by other observers) the condensation, 0·48 in., we have 16·84 in. as the mean evaporation. Possibly, this may need a little further reduction on account of the 1890–92 position, but it is not likely to be below 16 inches, which agrees very well with the 15 inches at Camden Square and the 18 inches at Strathfield Turgiss.

The 5 inch evaporator is kept by Mr. Latham more, we think, as a specimen of "how not to do it" and as evidence of why its records are bad, than for any other reason. It is a 5 inch cylinder about 1 foot long and three-quarters full of water, fastened to a post so that the top is $2\frac{1}{4}$ feet above the ground. Its results will be found in Table No. 4, they give a mean evaporation of $32\frac{1}{2}$ inches, or about double that shown by No. 1. Anyone who will compare tables Nos. 3, 5 and 6 (bearing in mind that they represent 9 a.m., and therefore not the time of greatest heat), will see at once that the excess indicated by the small cylinder is solely due to the heating up of the small quantity of water contained in it. Mr. Baldwin Latham has in fact (perhaps unconsciously) nearly reproduced the conditions of the Tank and the Watson evaporators at Strathfield Turgiss,* and obtained nearly similar results—

	Strathfield Turgiss.			Croydon.	
	Tank.	Watson.		12 in. in water.	5 inch.
Amount	17·81 in.	32·27 in.	.....	16·84 in.	32·50 in.
Per cent.....	100	181	.....	100	193

* See *British Rainfall*, 1889, pp. 18—43, but especially p. 38.

OBSERVATIONS ON EVAPORATION AT CROYDON,

Made by Mr. Baldwin Latham, M.Inst.C.E.

No. 1.—*Evaporation from 12-inch Evaporator floating in water.*

	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Jan.	·08	·04	·66	·45	·31	·23	·07	·19	·29	·09
Feb.	·38	·24	·43	·38	·59	·34	·29	·28	·32	·27
Mar.	·56	·66	1·28	1·62	1·05	1·20	·75	·74	·79	·94
Apr.	1·65	1·53	1·85	1·77	2·02	2·44	1·38	1·37	1·48	1·56
May	3·35	2·70	3·51	2·26	3·16	2·78	2·00	2·57	3·22	3·01
June	2·72	3·60	2·84	3·31	3·69	3·35	2·32	2·95	3·20	2·61
July	2·09	3·37	3·12	3·10	3·10	2·80	2·37	2·75	3·69	3·24
Aug.	2·53	2·74	2·75	2·59	2·74	2·49	1·64	1·89	1·84	2·67
Sept.	1·11	1·70	1·51	1·58	1·54	1·43	1·09	1·20	·98	1·45
Oct.	·46	·81	1·31	1·13	1·15	·58	·37	·69	·56	·79
Nov.	·51	·50	·88	·59	·50	·12	·31	·41	·26	·42
Dec.	·09	·26	·23	·54	·27	·04	·11	·25	·06	·22
Totals...	15·53	18·15	20·37	19·32	20·12	17·80	12·70	15·29	16·69	17·27

No. 2.—*Condensation in 12-inch Evaporator floating in water.*

	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Jan.	·07	·12	·06	—	—	·02	·18	·04	·06	·04
Feb.	—	·02	—	·03	·05	·07	·12	—	·06	·04
Mar.	·03	·05	—	·02	—	—	·04	—	·06	·02
Apr.	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	·01	—
June	—	—	—	—	—	—	—	—	—	—
July	—	—	—	—	—	·01	—	—	—	—
Aug.	—	—	—	—	—	—	—	—	—	—
Sept.	—	—	—	—	—	·03	—	·01	—	—
Oct.	·02	·02	·01	·02	—	·09	·27	·10	·02	·03
Nov.	·05	·03	·05	·05	·06	·57	·11	·18	·02	·06
Dec.	·15	·04	—	·21	·06	·51	·38	·05	·19	·15
Totals...	·32	·28	·12	·33	·17	1·30	1·10	·38	·42	·34

No. 3.—*Average Daily Temperature of Water at 9 a.m. in 12-inch Evaporator floating in water.*

	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897
	°	°	°	°	°	°	°	°	°	°
Jan.	34·8	34·5	41·1	33·5	34·7	33·2	36·5	32·6	38·6	35·2
Feb.	33·8	34·8	34·8	34·8	36·8	39·0	38·9	32·0	37·0	40·3
Mar.	36·8	38·1	40·8	37·4	35·3	43·0	42·1	41·3	45·5	44·3
Apr.	43·7	47·0	46·1	43·6	44·7	52·0	53·6	49·9	50·7	49·1
May	56·0	59·6	55·9	51·2	55·1	60·9	55·5	57·7	57·4	57·9
June	60·9	65·2	59·1	60·5	61·0	65·0	64·1	64·3	68·4	66·0
July	61·1	64·4	59·8	61·4	60·1	68·2	68·0	66·6	69·1	68·0
Aug.	61·6	61·7	59·9	59·1	62·7	68·9	65·2	66·6	62·7	66·6
Sept.	56·8	57·0	53·4	56·4	56·2	58·7	56·1	61·9	60·0	57·3
Oct.	44·5	47·8	48·2	50·3	44·9	52·7	50·6	48·6	48·5	51·0
Nov.	45·9	44·1	43·2	42·2	44·9	40·0	45·1	45·2	38·6	45·5
Dec.	39·0	36·2	32·3	39·9	36·1	36·7	39·4	37·9	36·6	37·6
Aver. ...	47·9	49·2	47·9	47·5	47·7	51·5	51·3	50·4	51·1	51·6

No. 4.—*5-inch Evaporator freely exposed in air.*

	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Jan.	·62	·54	1·46	·81	·80	·50	·55	·56	·65	·18
Feb.	·58	1·00	1·23	·91	·98	·94	1·14	·66	·76	·90
Mar.	1·45	2·14	3·05	2·49	2·46	2·84	2·42	1·64	1·71	2·06
Apr.	3·21	3·65	4·72	3·25	4·11	5·06	3·38	2·95	2·73	2·82
May	6·05	6·05	5·62	3·96	5·97	5·15	3·66	5·12	5·50	5·36
June	4·48	6·45	4·10	4·81	5·60	6·31	4·51	5·86	5·73	4·91
July	3·74	5·81	4·60	4·15	4·89	5·10	4·79	4·83	6·45	6·08
Aug.	4·30	5·43	3·78	3·17	4·29	5·17	3·02	3·97	2·95	4·55
Sept.	2·53	3·71	3·08	2·59	2·44	2·95	1·88	3·46	1·50	2·19
Oct.	1·31	1·62	1·96	1·56	1·49	1·83	1·29	1·06	·80	1·21
Nov.	1·32	·73	·95	·87	·77	·84	·93	·78	·54	·62
Dec.	·54	·63	·51	·97	·55	·42	·74	·70	·46	·50
Totals...	30·13	37·76	35·06	29·54	34·35	37·11	28·31	31·59	29·78	31·38

No. 5.—*Average Daily Temperature of Water at 9 a.m. in 5-inch Evaporator freely exposed in air.*

	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897
Jan.	36°·9	36°·7	41°·7	34°·1	36°·1	35°·8	37°·0	34°·1	38°·8	35°·1
Feb.	36·1	37·3	35·6	34·5	37·3	39·4	39·8	32·3	37·3	41·9
Mar.	39·0	40·8	45·0	40·0	37·8	44·5	43·7	43·0	45·5	45·6
Apr.	45·4	49·1	45·1	45·9	47·2	55·2	55·6	51·3	52·7	49·0
May	61·8	63·2	59·0	55·2	61·7	65·3	58·0	62·3	60·4	60·8
June	64·0	68·0	61·5	62·5	66·1	68·7	67·1	68·5	70·4	67·4
July	63·7	68·3	59·8	62·4	63·3	71·3	71·0	68·4	71·3	71·3
Aug.	66·0	66·4	59·5	59·6	62·8	73·3	67·4	69·7	63·0	68·6
Sept.	58·9	60·9	57·3	57·0	56·8	61·0	55·4	64·9	60·3	57·6
Oct.	46·3	46·6	47·7	49·9	43·1	53·6	49·7	46·2	45·3	49·4
Nov.	46·4	43·0	42·0	41·0	43·1	40·1	44·5	45·0	37·2	43·5
Dec.	40·5	37·6	32·5	40·2	36·3	37·6	39·2	38·1	37·8	38·3
Aver....	50·4	51·5	48·9	48·5	49·3	53·8	52·4	52·0	51·7	52·4

No. 6.—*Temperature of the Dew Point at 9 a.m.*

	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897
Jan.	33°·7	33°·7	40°·4	31°·2	32°·8	31°·2	33°·8	31°·0	37°·7	32°·5
Feb.	29·5	31·6	33·0	33·9	35·2	38·6	36·0	23·2	35·4	39·8
Mar.	33·2	34·7	39·5	35·9	31·5	39·5	38·7	37·0	41·1	39·6
Apr.	37·4	41·1	38·6	38·7	37·8	41·7	44·3	43·8	42·4	40·1
May	43·3	50·3	46·6	45·6	45·1	48·9	42·6	47·0	44·2	43·0
June	51·3	54·6	51·6	52·4	49·5	51·5	51·2	50·9	54·0	55·1
July	52·6	53·1	53·5	53·4	51·3	55·0	55·6	53·5	55·6	54·2
Aug.	54·0	53·6	54·0	53·5	55·2	58·2	54·2	56·2	54·6	56·8
Sept.	52·7	50·7	53·8	54·0	50·6	50·3	50·3	56·0	53·6	50·4
Oct.	42·0	45·5	45·0	47·9	41·0	47·0	46·8	42·3	42·6	46·5
Nov.	44·2	41·8	39·6	40·4	42·2	37·1	43·1	43·9	35·2	42·2
Dec.	37·4	37·2	25·7	37·0	32·1	36·8	37·4	37·0	36·9	36·4
Aver....	42·6	44·0	43·4	43·7	42·0	44·7	44·5	43·5	44·4	44·7

COMPARISON OF GERMAN & ENGLISH RAIN GAUGES,

AND OF

MR. SIDEBOTTOM'S SNOW GAUGE

AT CAMDEN SQUARE, N.W.

1897	Ordinary English 8 in. gauge, reduced by 4 per cent.	Dr. Hellmann's Gauges.				Sidebottom's Snow Gauge.		
		No. 1.	No. 2.	Difference from reduced English.		Ordinary 8 in. gauge reduced by 5 per cent.	Total.	Difference from Reduced 8 inch.
				No. 1.	No. 2.			
	in.	in.	in.	in.	in.	in.	in.	in.
Jan.	1·97	1·93	1·94	—·04	—·03	1·95	2·00	+·05
Feb.	2·64	2·62	2·65	—·02	+·01	2·61	2·69	+·08
Mar.	3·29	3·27	3·29	—·02	·00	3·25	3·23	—·02
April	1·51	1·46	1·45	—·05	—·06	1·50	1·45	—·05
May	1·04	·91	·90	—·13	—·14	1·03	·99	—·04
June	1·80	1·73	1·73	—·07	—·07	1·78	1·77	—·01
July	·61	·55	·56	—·06	—·05	·61	·55	—·06
Aug.	2·80	2·78	2·83	—·02	+·03	2·77	2·77	·00
Sep.	2·64	2·65	2·66	+·01	+·02	2·61	2·67	+·06
Oct.	·54	·51	·50	—·03	—·04	·53	·48	—·05
Nov.	1·00	·99	·98	—·01	—·02	·99	·96	—·03
Dec.	2·11	2·09	2·09	—·02	—·02	2·09	2·05	—·04
Total 1897	21·95	21·49	21·58	—·46	—·37	21·72	21·61	—·11
		with ×		with ×				
1896	22·59	21·45	22·08	—1·14	—·51	22·34	21·95	—·39
1895	20·61	20·05	20·62	—·56	+·01	20·39	20·31	—·08
1894	26·84	26·01	27·11	—·83	+·27	26·55	26·48	—·07
1893	18·99	18·22	18·82	—·77	—·17	18·82	18·58	—·24
1892	21·71	21·30	21·81	—·41	+·10			

We are not sure that it will be necessary to print these comparisons after 1898, as nearly all the facts have now been ascertained; but at present the effect of the divider in Dr. Hellmann's gauge is not quite certain. He intends it to be used only in time of snow. We wished to ascertain the effect of leaving that large surface to be wetted all through the year. Apparently it prevented 0·59 in., or about 2 per cent., of the total rainfall reaching the receiver. It has now been taken out for 18 months, and by the end of June, 1898, the effect of the removal ought to be determinable.

London has so little snow as to be a bad place for testing the Sidebottom rain gauge; it is excellent and luxurious in time of snow, but the large surface to be wetted prevents its indicating the full amount at other times.

RAINFALL AT THE ROYAL OBSERVATORY, GREENWICH.

Lat., 51° 28′ 38″ N. Long., 0° 0′ 0″

Communicated by W. H. M. CHRISTIE, ESQ., C.B., M.A., F.R.S., Astronomer Royal.

1897	No. of Rainy Days.	MONTHLY AMOUNT OF RAIN COLLECTED IN EACH GAUGE.							
		Osler's Anemometer		On roof of Octagon Room.	On roof of Magnetic House.	On roof of Photo-graphic Thermo-meter Shed.	Gauges partly sunk in the ground.		
		Self-registering Gauge.	Second Gauge.						
Height above Ground.	...	50ft. 8in.	50ft. 8in.	38ft. 4in.	21ft. 6in.	10ft. 0in.	5in.	5in.	5in.
Height above Mean Sea Level.	...	205ft.	205ft.	193ft.	176ft.	165ft.	155ft.	155ft.	155ft.
		in.	in.	in.	in.	in.	in.	in.	in.
January	17	1·024	1·061	1·269	1·399	1·551	1·615	1·596	1·547
February	14	1·801	1·958	2·145	2·176	2·339	2·385	2·318	2·332
March	17	2·131	2·034	2·472	2·809	3·153	3·347	3·240	3·221
April	16	·986	·964	1·300	1·425	1·532	1·617	1·533	1·525
May	11	·818	·772	1·089	1·100	1·176	1·251	1·156	1·234
June	12	1·539	1·579	1·738	1·897	1·970	1·935	1·906	1·946
July	7	·503	·430	·605	·697	·711	·732	·700	·712
August	20	2·156	2·107	2·507	2·676	2·799	2·859	2·764	2·790
September	16	1·796	1·880	2·198	2·433	2·576	2·697	2·596	2·622
October	11	·307	·316	·391	·456	·511	·478	·486	·494
November	10	·548	·553	·827	·937	1·050	1·068	1·085	1·083
December	18	·991	·997	1·422	1·609	1·985	2·142	2·066	2·144
Sums	169	14·600	14·651	17·963	19·614	21·353	22·126	21·446	21·650
No. of Gauge	...	1	2	3	4	5	6	7	8

The monthly record terminates at midnight on the last day of the month.
A rainy day is considered to be one on which 0·005 in., or more, is collected in gauge No. 6.
Of the ground gauges 6, 7, and 8, No. 6 is taken as standard, No. 7 is the old monthly gauge, and No. 8 is a gauge added in 1881.

January 19th, 1898.

THE STAFF OF OBSERVERS.

WHEN dealing with a considerable body of facts it is well known that there is a great tendency towards uniformity. We have been examining what proportion of the records for any given year may be expected to be found in the volume for the subsequent year, and in all the cases that we have examined it comes out between 92 and 94 per cent. There is no organization so strict as our own in rejecting records which are incomplete, or rather where any change in the locality, or the instrument, is reported, and we are therefore surprised that the total absentees form only 6 to 8 per cent., and of these we believe that nearly half consist of indifferent observers, whose irregularity is constantly landing them either among the "Absent Records," or among the "Insertions." Of course, the best records, and happily they may be counted by hundreds, if not by thousands, are those which never appear in the list of "Absent Records." These steady correspondents, the mainstay of our work, could help us considerably if they would look over the entries of "*Not received*," and "*No reply*," on the following pages, and tell us anything they may know as to what has happened at the stations to which those remarks are appended.

IMPORTANT LOSSES.

All losses are bad, but in noting a few we may suggest districts from which fresh records would be especially useful.

East Sussex.—Several stations round Mayfield.

Bedford.—Cardington.

Devon.—Chagford. This leaves the northern part of Dartmoor very badly provided.

Cornwall.—St. Just-in-Penwith. This leaves no station west of Penzance, and we are still without one on the Lizard promontory.

Surely the Cornwall County Council, which (alone, we believe, among County Councils) publishes a monthly meteorological report, will see to this.

Worcester.—Orleton. This is very serious; the Orleton record began in 1831, and its termination is a great loss to the whole West of England, and also to Central Wales.

Lancashire.—The Colne Corporation, having obtained their Act for constructing Water Works, have shown their interest (!) in scientific work by stopping the whole of the records which enabled them to obtain their Act.

Northumberland.—Alwinton (Harbottle Castle). This record broke down owing to a change of gardener. We are glad that it has been restarted, as the centre of this county has not enough stations.

Westmoreland.—As will be seen by reference to the map in the article on the rainfall of the Lake District, the loss of Longsleddale is very serious.

Montgomery.—Dolfor. We are sorry for the temporary loss of this station, and fear that for some few years it has not been trustworthy. Immediately that we heard of the gauge being out of order we communicated with the observer and sent a new one.

Roxburgh.—We are sorry to miss the returns from New Castleton. Three applications have been made, and no reply has been received.

Argyll.—The two losses here are both serious. Kilmory is one of the best West of Scotland records, which has been sent to us for very many years—first by Sir J. W. P. Campbell Orde, (3rd) Bart., and subsequently by his son, Sir Arthur, (4th) Bart. Now, unfortunately, the heir to the property is quite too young for an observer. What has happened to the Gruinart rain gauge we are unable to imagine.

Aberdeen.—By the death of Dr. Cruickshank we have lost, not merely the best Aberdeen record, but one of the longest in the East of Scotland.

Ireland.—Out of our small total of 181 Irish stations we have 12 absentees, and every one is to be regretted. True, we have 15 new stations, so that numerically we are better off by 3; but we have heard nothing from Major Somerset Maxwell since he became Lord Farnham, and we need half-a-dozen helpers as energetic and successful as he was, in order to make Ireland as efficiently represented as we desire.

Important Gains.

Sussex.—Several stations to the N. and W. of Beachy Head, also an important one where no record has ever before been kept, on the high land near Brighton racecourse.

Hampshire.—The most important of the many new stations in this county is Tower Hill House, Kingsclere, as the N.W. corner of the county is not fully represented. A station at or near Highclere would be acceptable.

Dorset.—There is considerable improvement in this county, due largely to the energy of Mr. H. S. Eaton. His gathering of the observers of the county, at the meeting of the Dorset Natural History and Antiquarian Field Club, at Dorchester in December was an excellent idea, agreeable to all and well carried out.

Devon.—The chief increase here is in the vicinity of Barnstaple, due to the publication of a local table by Mr. Wainwright, of the North Devon Athenæum.

Yorkshire.—We are glad to have several new stations in the vicinity of Harrogate, established by the Water Works Company, but now transferred to the Corporation.

Brecknock.—Although temporarily we have lost Llanwrtyd Wells, we are glad to say that we hope to have several fresh returns next year. We already have one new record, Llangammarch Wells, (also Llandrindod Wells in the next county) and have started two other stations in the district.

Montgomery.—The station of Bwlch Tomlyd is very difficult to visit; the rainfall, according to the old gauge, was very large, we have now fixed a new one, and the record is as high as ever. It is a remarkable spot—not recommended for a residence.

Inverness.—There is, and is going to be, considerable improvement in this county. We are glad to have a record from our old correspondent, Mr. Livingstone, from his new home on the high part of Fort William; Scalpay Island is an important new locality, and the two new stations of the British Aluminium Company are useful. But besides these, we have the pleasure of knowing that gauges have been at work since January 1st, 1898, at three stations on the new Invergarry and Fort Augustus railway.

Sutherland.—Although we have only one new record from Sutherland, viz.: Lairg, (which we need hardly say is very welcome), we mention the county, because last year we pointed out the need for

serious action, and because we are glad to say that, thanks to the help of Mr. Joseph Baxendale, of Ben Klibreck, and to Mr. Gorton's little legacy, we have been able to obtain three stations so excellently placed, that although a few more would be acceptable, the county will, as long as they continue, be fairly represented.

Summary.

It only remains for us to give the usual tabular statement, and a few words of comment thereupon. The total number of our perfect records has again risen above all precedent, and happily not so much relatively in England as in other parts. We want additional Irish and Scotch returns, much more than we do English ones, but we welcome accurate observations from any part of the British Isles.

Number of perfect rainfall records published in the volumes of British Rainfall for the undermentioned years.

Years.	England.	Wales.	Scotland.	Ireland.	Gross Total.	Increase over previous year.
1860...	163	5	—	—	168	—
1861...	334	9	109	20	472	—
1871...	1038	88	311	67	1504	—
1881..	1548	131	313	153	2145	—
1891...	2091	168	359	181	2799	23
1892...	2113	178	367	192	2850	51
1893...	2205	193	389	200	2987	137
1894...	2269	184	395	195	3043	56
1895...	2304	196	398	186	3084	41
1896...	2427	209	402	181	3219	135
1897...	2492	223	419	184	3318	99
Difference from 1896—						
Increase	65	14	17	3	99	99
Decrease	—	—	—	—	—	

MIDDLESEX (73).

ABSENT RECORDS.	INSERTIONS.
Staines (Cherry Orchard)—*Observer moved.*	Staines (Cambria House).
London (Randolph Gardens, W.)—*Record imp.*	Isleworth (Spring Grove House).
,, (Portsdown Road, W.)—*Obs. dead.*	London (Hamilton Terrace).
Hampstead (Branch Hill Lodge)—*Record unreliable.*	Upper Clapton.
	Stoke Newington (Cazenove Road).
	Barnet (Trent Park).

SURREY (135).

Dunsfold Common—*Record unreliable.*	Dunsfold Rectory.
Witley (The Mount)—*No observations.*	Cranleigh Common.
Godalming (Charterhouse)—*Observer moved.*	Ewhurst (Woolpits).
Holmwood—*Record ceased.*	Reigate (Hartswood).
Guildford (Wern, Stoke)—*Observer moved.*	Red Hill (Trevor Lodge).
Reigate (Dovers Lodge)—*Record ceased.*	Horsley, West.
Reigate Hill (Margery Hall)—*Record imperft.*	Horsley Towers.
Leatherhead (Newlands)—*Record imperfect.*	Kenley (Hazelea).
Caterham Valley(Birchwood Ho.)—*Rec. ceased.*	Chelsham (Fairchildes).
Esher (Claygate)—*Observer dead.*	Weybridge (Heath Field).
Croydon (Lower Addiscombe Rd.)—*Rec. ceased.*	Sutton (Sewage Works).
,, (Chatfield Road)—*Observer moved.*	Croydon (Woburn Road).
Egham (Cooper's Hill)—*Not received.*	Worcester Park (Parkside).
	Thames Ditton (Weston Green).
	,, ,, (Giggs Hill).
	Putney Heath.

KENT (129).

Rolvenden (Hole Park) —*Observer moved.*	Appledore (Snargate).
Dover (Dover College)—*Not received.*	Goudhurst (Scotney Castle).
Tunbridge Wells (Southborough)—*Obs. dead.*	Folkestone (Radnor Park).
Tunbridge (Penshurst Place)—*Not received.*	Tunbridge Wells (Belvedere Ter.).
Harrietsham (Stede Hill)—*Record ceased.*	Horsmonden (Broad Ford House).
Maidstone (Hunton Court)—*Record ceased.*	,, (Sprivers).
Keston Tower—*Observer dead.*	Tunbridge (Primrose Hill).
Chislehurst (The Oaks)—*Record ceased.*	Shepherdswell (Fredville).
Forest Hill (The Nurseries)—*Return impft.*	West Malling (Wistaria House).
	Canterbury (Irrigation Works).
	Seven Oaks (St. John's Hill).
	Rochester (Rede Court).
	St. Peter's—*New gauge.*
	Bickley (Elmhurst).
	Dartford (West Hill House).

WEST SUSSEX (37).

Chichester (Charlton) —*No reply.*
Petworth Rectory—*Observer moved.*
Midhurst (Cowdray Park)—*Record ceased.*
West Thorney.
West Bourne.
West Stoke Rectory.
Steyning (Crescent Road).
Blackdown House [Haslemere].

EAST SUSSEX (57).

Bexhill (Barrack Hall)—*Gauge moved.*
Hurstpierpoint (Hampton Lodge)—*No reply.*
Heathfield (Spring Lodge)—*Record ceased.*
Cross in Hand (Montpellier)—*Observer moved.*
,, ,, (Heatherden)—*Not for publictn.*
Wivelsfield (Abbot's Leigh)—*Record ceased.*
Mayfield Vicarage—*Observer dead.*
Crowborough (South View)—*Observer dead.*
Jevington (Church Farm).
Litlington (Plough & Harrow Inn).
Willingdon (Hill Cottage).
Brighton (Hove).
,, (W. W. Race Hill).
Isfield Place—*2nd gauge.*

HAMPSHIRE (98).

Parkhurst (Brookfield)—*Observer moved.*
West Cowes (Holmwood)—*Record ceased.*
Lyndhurst (Cuffnells)—*No reply.*
Botley (The Hollies)—*Record ceased.*
Yarmouth Schools.
Ryde.
Southampton(AngleseaRd.,Shirley)
Horndean (Blendworth Lodge).
Lyndhurst (Brook).
East Meon (Westbury House).
Ampfield Vicarage.
West Dean.
Hartley Maudit Rectory.
Alton Grammar School.
Crondall (Warren Corner)—*2nd g.*
Kingsclere (Tower Hill House).

BERKS (45).

Winkfield (Elm Lodge)—*Observer moved.*
Old Windsor (The Friary)—*Record imperfect.*
Twyford (Hurst Grove)—*No reply.*
Aldermaston Wharf.
Ascot (Manor Farm)—*2nd gauge.*
Hungerford(Kintbury,ForburyGve)
Abingdon (Caldecott House).

HERTS (53).

Barnet(TrentPark)—*Transferred to Middlesex.*
Tring (Elm House)—*No reply.*
Watford (London Orphan Asylum).
Chipperfield (Little Callipers).
Gilston Park.
Baldock (Hitchin Street).
Royston (Melbourne Street).

BUCKS (27).

Slough (Upton)—*3rd gauge, Record ceased.*	Eton (Tangier Island). Slough (Upton Park).

OXFORD (41).

	Dorchester (Bishops Court). Steeple Aston

NORTHAMPTON (52).

Thrapstone (Hargrave)—*Record ceased.* West Haddon—*Return imperfect.*	Grimsbury [Banbury]. Mears Ashby. Scaldwell. Broughton Manor. Wansford (Apethorpe Lodge).

HUNTS (9).

	St. Ives (The Priory).

BEDFORD (18).

Biggleswade (Chilworth)—*No reply.* Cardington—*No reply.*	Bedford (St. Peter's Street).

CAMBRIDGE (38).

Cambridge (Fulbourne Asylum)—*Not received.*	Cambridge (Holm Leigh). Tydd St. Giles.

ESSEX (62).

Ilford (Great Gearies)—*Observer moved.* Maldon—*Observer dead.* Writtle—*Record imperfect.*	Romford (Hare Street). Billericay (Norsey Manor). Brentwood (Shenfield Rectory). Danbury Rectory. Chelmsford (Springfield Place). Great Leighs. Dunmow (Saling Grove).

SUFFOLK (45).

Ipswich (Burwood)—*Observer moved.* Woodbridge (The Cedars)—*Observer moved.* Moulton [Newmarket]—*Not received.* Lowestoft (Somerleyton Rectory)—*Rcd. ceased.*	Felixstowe (West View). Ipswich Museum. Woodbridge Abbey. Southwold—*2nd gauge.* Elvedon Hall.

NORFOLK (55).

Loddon (Bergh Apton Rectory)—*Rcd. ceased.*
Cantley (Manor Farm)—*Observer moved.*
Swaffham (Pickenham Hall)—*Record ceased.*
Yarmouth (Halvergate Hall)—*Obsvr. moved.*
Swaffham (London Street)—*Record ceased.*
Holkham, 2 *gauges—No reply.*
Moulton.
Taverham Hall.
North Walsham (E. Ruston Grange).
Holt (The Yuccas).

WILTS (49).

Salisbury (West Dean)—*Transferred to* Hilmarton—*Record ceased.* [*Hampshire.*
Ashley Rectory [Tetbury]—*Record ceased.*
Tisbury (The Academy).
Mere (Charnage).
Trowbridge (Steeple Ashton).
,, (Lovemead).

DORSET (47).

Weymouth (Langton Herring)—*Obs. dead.*
Poole (The Yarrells)—*Observer dead.*
Powerstock (West Milton)—*Record ceased.*
Weymouth (Markham House).
East Fleet (Fleet House).
Winterbourne Herringstone.
Dorchester (Fordington).
Poole (Parkstone)—*New gauge.*
Sturminster Marshall (Bailie Ho.)
Broadwindsor (Hursey House).
Winterbourne Houghton.

DEVON (102.)

Coryton (Lew Down)—*Observer moved.*
Chagford (Batworthy)—*No reply.*
Torrington (Langtree)—*No reply.*
South Brent (Great Aish).
Dartmoor (Siward's Cross).
Exmouth (Betworth).
Budleigh Salterton (Syon House).
Christow (Laployd).
,, (Blackingstone).
Tiverton (Broomhill).
Alverdiscott (The Firs).
Abbotsham (Riccard's Down).
Bideford (Northam, St. Helens)
Instow.

CORNWALL (44).

Penzance (Trevean)—*Observer moved.*
St. Just-in-Penwith—*Return imperfect.*
Redruth (Trewirgie)—*Return imperfect.*
Truro (W. W., Lower Tregurrow).
,, (Agar Road).
Liskeard (Trevillis).
,, (Green Bank).
Bodmin (Treledan).

SOMERSET (73).

Yeovil (Hendford)—*No reply.*
Wellington (Windwistle Ho.)—*Record ceased.*
Temple Combe (Stowell Rectory)—*Obs. dead.*
Taunton (West Monkton)—*Not received.*
Wincanton—*Observer moved.*
Radstock (Paulton House)—*No reply.*
Bath (Bathwick)—*No reply.*
Flax Bourton (Tyntesfield)—*No reply.*

Ilminster (Bay House).
North Cadbury Rectory
Castle Cary (Pitcombe Vicarage).
Bruton (King's School).
Winsford.
Bridgwater (Farm Stowey).
,, (Nether Stowey).
Holford (Woodlands House).
Wells (The Deanery Gardens).
Frome (Orchardleigh).
Axbridge (Camerton Court).
Hutton Rectory.
Weston-super-Mare (Worle).

GLOUCESTER (74).

Clifton College—*Not received.*
Chipping Sodbury (Ridge Ho.)—*Obsvr. dead.*
Thornbury (Prospect House)—*Obsvr. moved.*
Amberley (Highlands)—*Record imperfect.*
Cirencester (Claremont Place)—4 *g's., Obs. dead.*
Stonehouse (Wycliffe College)—*Record lost.*
Coleford (Staunton Rectory)—*Observer moved.*

Cheltenham (Dowdeswell).
Bourton-on-the-Water (Chardwar).
Stow-on-the-Wold (Oddington).

HEREFORD (33).

Lugwardine (The Laurels).
Hereford (Burghill Court).
Kington (Belmont).

SHROPSHIRE (31).

Cleobury Mortimer (Neen Savage)—*Rcd. ceased.*
Burwarton – *Observer dead.*

Bridgnorth (Cantreyn Bank).

STAFFORD (41).

Brewood—*No reply.*
Burton (St. Paul Street)—*No reply.*

Wednesbury (Ocker Hill).
Wolverhampton (Graiseley).
Shugborough.
Maer Hall Gardens.

WORCESTER (35).

Worcester (Water Works)—*Gauge leaking.*
Tenbury (Orleton)—*Observer moved.*
King's Heath [Birmingham]—*Obsvr. moved.*

Upton-on-Severn (The Eades).
Malvern (British Camp, Res. S.)
,, (,, ,, ,, N.)
King's Heath (Brandwood House).

WARWICK (34).

Kenilworth (Park Hill)—*Record ceased.*

Shirley.

LEICESTER (23).

Barkby—*Observer dead.*
Loughborough (Nan Pantan Res.) M—*Not recd.*

Prestwold Hall.

RUTLAND (6).

Tolethorpe Hall [Stamford]—*No observations.*

Ketton Hall [Stamford].
Tinwell, South View [Stamford].

LINCOLN (70).

Bourne (Wytham-on-the-Hill)—*Recd. ceased.*

Fillingham Manor.
Yarborough (The Rectory).

NOTTS (45).

Kingston Fields (Dairy Institute).
Nottingham (Ropewalk, The Park).
Southwell (Oxton Hall).
Papplewick Hall.
South Collingham.
Worksop (St. Cuthbert's College).

DERBY (43).

Willington (W. W. Milton)—*No observations.*
Hazelwood (Holmside) 2 *gauges*—*Obs. moved.*
Stuffynwood Hall [Mansfield]—*Observer dead.*
Chesterfield (Linacre Reservoir) *old g.*—*Not rcd.*
Norton [Sheffield]—*Record imperfect.*

Mickleover (County Asylum).
Matlock Dale (Tor House).
Strines (Higher Cliffe).

CHESHIRE (68).

Chester (Waterworks)—*No reply.*
Northwich (Wincham Hall)—*Observer dead.*
Frodsham (Fir Grove)—*Record ceased.*
,, (Dunsdale)—*Record ceased.*
Thelwall (Millington Ho.) M—*Recd. imperfect.*
Broadbottom (Harewood Lodge)—*Recd. ceased.*
Mottram—*No reply.*
,, (Matley's Field)—*Gauge moved.*

Sandbach (Malkin's Bank).
Middlewich.

LANCASHIRE (184).

Warrington (The Cemetery)—*Recd. imperfect.*
St. Helens (Eccleston Hill)—*Record imperfect.*
Manchester (Whitworth Park)—*No reply.*
Barton (Anderton Fold)—*Record unreliable.*
Wycoller (Brink End Allotment)—*Recd. ceased.*
,, (,, ,, Moor)—*Record ceased.*
,, *Record ceased.*
Emmott Moor—*Record ceased.*
,, ,, *Record ceased.*
Laneshaw—*Record ceased.*
,, *Record ceased.*
Hest Bank—*Observer dead.*
Liverpool (Smithdown Road).
,, (Breeze Lane).
Manchester (Urmston Sewage Wks.)
Bury (Gin Hall) No. 2.
Rochdale (Nayden Filters).
,, (,, Dean) *Old g.*
Southport (Park crescent).
Haslingden (Mitchell's House).
Over Darwen (Sunnyhurst Res.)
,, ,, (Earnsdale Res.)
,, ,, ,, ,,
Rawtenstall (Cloughbottom Res.)
Lancaster (Caton).
Morecambe.
Grange-over-Sands (Belmont).

YORKSHIRE—WEST RIDING (258).

Sheffield (Tinsley Vicarage)—*Not received.*
Doncaster (Wadworth Hall) 5 *in. g.*—*Return*
Methley Park—*Not received.* [*same as* 8 *in. g.*
Halifax (Ovenden)—*Record imperfect.*
Wetherby (Ribston)—*Observer moved.*
Harrogate (Bog Valley Gardens)—*No reply.*
Otterburn-in-Craven—*Record ceased.*
Pateley Moor (Smaden Head)—*Rcd. unreliable.*
Sedbergh (Gate)—*Not received.*
Hemsworth Hall.
Keighley (Mornington Terrace).
Harewood House.
Skipton (Gill Grange, Silsden).
,, (Bolton Road, ,,).
Ilkley (Eaton Road).
Pannal (Kirkby Overblow).
York (The Retreat).
Goldsborough Hall.
Nun Monkton.
Harrogate (Ten Acre Reservoir).
,, (Beaver Dyke Res.)
,, (Irongate).
West End (Rocking Hall).
Washburn Dale (Ray Bank).
,, Head.

YORKSHIRE—EAST RIDING (25).

Catton Rectory [York]—*Record lost.*
Driffield (York Road) M—*Not received.*
Hull (Springhead).
Cottingham.

YORKSHIRE—NORTH RIDING (41).

Richmond (The Grove)—*Observer moved.*
Fylingdales Vicarage—*Observations imperfect.*
Easingwold (Marton Vicarage).
Malton.
Guisborough (Lockwood Beck Res.)
Middlesborough (Ormesby). [M.

DURHAM (39).

Darlington (Dinsdale Rectory)—*Obsvr. dead.*
,, (Brinkburn)—*No reply.*
Staindrop (Raby Castle)—*Return incorrect.*
Shotley Bridge—*No reply.*
Eastgate (All Saints' Vicarage).
Ryton-on-Tyne.

NORTHUMBERLAND (48).

Morpeth (Meldon Park)—*Observer dead.*
,, (Bothalhaugh Garden) M—*Recd. imp.*
Alwinton (Harbottle Castle)—*No observations.*
North Shields (Chirton Cottage).
Morpeth.
Rededale (Horsley).

CUMBERLAND (71).

Duddon Valley (Ulpha Vic.)—*Observer moved.*
Keswick (Derwent Hill)—*Record unreliable.*
Bassenthwaite (Mire House)—*Record lost.*
Ravenglass (The Grove).
Boot (Gillbank).
Cockermouth (Ullock).
,, (Fairfield, Lorton).
Penrith (Ennim).
Bassenthwaite (Armathwaite Hall).
Carlisle (Rose Castle).
,, (Newby Grange).

WESTMORELAND (34).

Longsleddale—*Record ceased.*
Shap (Oddendale)—*Record ceased.*
Kirkby Lonsdale (Barbon).
Kendal (Helm View).
,, (Holmcroft).

MONMOUTH, WALES, AND THE ISLANDS.

MONMOUTH (26).

Llanvihangel Court, M—*Gauge overflowed.*
,, Crucorney—*Observer moved.*
Portskewett (Porton, Caldicot).
Usk
Llantilio Crosseny (Brynderi).

GLAMORGAN (39).

Cardiff Sanatorium—*Return incorrect.*
Aberdare (Cwmaman)—*No reply.*
Swansea (Uplands' Crescent).
Briton Ferry.

CARMARTHEN (6).

Llanelly (New Road).
Llanwrda (Dolaucothy).

PEMBROKE (8).

Brawdy (Pen-y-cwm)—*Observer moved.*
Haverfordwest (Picton Castle).

CARDIGAN (4).

Tregaron Vicarage—*Observer moved.*

BRECKNOCK (37).

Llanwrtyd Wells—*Record ceased.*
Ebbw Vale Waterworks.
Llangammarch Wells.

RADNOR (18).

Llandrindod Wells.
Llanbadarn Fynydd (Pen Ithon).

MONTGOMERY (12).

Newtown (Dolfor)—*Gauge defective.*
Llangurig (Ystrad-olwyn-fawr)
Llangadfan. [*New g.*
Garthbibio (Bwlch Tomlyd).

FLINT (7).

Caergwrle—*Gauge moved.*
Bagillt.

DENBIGH (21).

Denbigh (Ystrad)—*No observations.*
Llangadwaladr (Penygwely Res.)
Ruthin (Plas Isaf).
Llanefydd (Rhyl W. W., S.)
,, (,, ,, W.)
,, (,, ,, E.)
,, (Plas Uchaf Res.)
Colwyn Bay (Ingleside).

MERIONETH (8).

| Dolgelly (Dolmelynllyn).

CARNARVON (11).

Carnarvon (North Road)—*Record ceased.*
Llanfairfechan—*Observer dead.*
| Llanbedr-y-Cennin.

ANGLESEA (6).

ISLE OF MAN (9).

Douglas (Derby Square)—*Observer dead.*
| Bishop s Court.

ISLES OF SCILLY (3).

| St. Mary s.

JERSEY (2).

GUERNSEY (6).

Cobo—*Record ceased.*
| L'Ancresse.

SCOTLAND.

WIGTON (5).

KIRKCUDBRIGHT (18).

Dalbeattie (Station Road)—*Observer moved.*
Irongray (Drum Park) *old gauge—Unreliable.*
| Kirkcudbright (Balmae).
| Dalbeattie (Little Richorn).

DUMFRIES (13).

Thornhill (Capenoch House)—*Record ceased.* | Langholm.
| Moniaive (Maxwelton Garden).

ROXBURGH (13).

New Castleton (The Flatt)—*No reply.*
,, ,, (Kirndean)—*No reply.* | Jedburgh (Ancrum Bridge).

SELKIRK (3).

PEEBLES (6).

| Innerleithen (The Glen).
| Kirkurd (Castle Craig).

BERWICK (6).

Eyemouth—*Record ceased.* |

HADDINGTON (7).

| Aberlady.

EDINBURGH (24).

Dalkeith—*Return unreliable.*
Edinburgh (Charlotte Square) 2 *g's.*—*No reply.* | Edinburgh (City Observatory).

LINLITHGOW (4).

| Carribber Reservoir.

LANARK (14).

| Glasgow (Belvedere Hospital).

AYR (16).

Loch Finlas—*Record unreliable.* | Ballantrae (Glendrishaig).

RENFREW (30).

| Paisley (The Coats Observatory).

DUMBARTON (5).

STIRLING (19).

Duntreath—*Record ceased.*
Stirling (Ravenna Cottage)—*Observer moved.* | Falkirk (Kerse) *New gauge.*
Little Denny Filters.
Glengyle.

BUTE (4).

Kingarth (Plan)—*Record imperfect.* | Arran (Pladda).

ARGYLL, MAINLAND (18).

Lochgilphead (Kilmory)—*Observer dead.* | Oban (Loch-na-gleann-na-brathrach)

ARGYLL, INSULAR (17).

Islay (Gruinart School House)—*Rec. unreliable* | Mull of Kintyre.
Gigha.
Mull (Lochbuie).

CLACKMANNAN (3).

KINROSS (4).

| Cleish Castle.

FIFE (15).

| Culross (Westgrange).
| Carnbee (Ovenstone W. W.).
| Leslie (Lothrie Reservoir).
| Balmerino.

PERTH (31).

Callander (Leny)—*Record lost.*
Glen Gyle—*Transferred to Stirling.*

| Abernethy.
| Killin (Auchmore).
| Pitlochry.

FORFAR (35).

Monifieth (Fountain Brae)—*No reply.*

| Dundee (West Green House).
| Liff.
| Glamis Castle.

KINCARDINE (5).

| Johnshaven (Brotherton).
| The Burn [Brechin] *House.*

ABERDEEN (15).

Cromar (Logie Coldstone School)—*Obs. moved.*
Aberdeen (Rose Street)—*Observer dead.*
,, (Gordon's Hospital)—*Not received.*

Aberdeen (Duthie Park).
Ellon (Mains of Waterton).

BANFF (5).

ELGIN OR MORAY (8).

| Forres H R.S.
| Covesea Skerries.

NAIRN (3).

WEST ROSS (11).

EAST ROSS (8).

Dingwall (Uplands)—*No observations.*
Cromarty—*Return imperfect.*

WEST INVERNESS (16).

Fort William (Ardtraigh).
Skye (Scalpay Island).

EAST INVERNESS (11).

Loch Ness (Whitebridge).
,, ,, (Aberchalder).

SUTHERLAND (7).

Scourie—*Record ceased.*

Lairg.

CAITHNESS (4).

Wick (Nosshead)—*Record unreliable.*
Dunnethead—*Return unreliable.*

ORKNEY (10).

SHETLAND (6).

IRELAND.

CORK (11).

Bantry House—*Not received.*

KERRY (8).

Gap of Dunloe (Garrymeen).

WATERFORD (8).

Waterford (Rockenham)—*Transferred to Kilkenny.*	

TIPPERARY (7).

Caher (Duneske)—*Return imperfect.*	Cahir Abbey.

LIMERICK (7).

Adare Manor.
Limerick (Roxborough) *2nd gauge.*
,, (Mulgrave Street).

CLARE (8).

Inagh (Mount Callan).
Lahinch (Moy House).

WEXFORD (7).

Wexford (Alma)—*Observer dead.*	

KILKENNY (7).

Rockenham [Waterford].
Goresbridge (Barraghcore House).

WICKLOW (4).

Newcastle (Killadreenan).

CARLOW (2).

QUEEN'S COUNTY (1).

KING'S COUNTY (5).

Tullamore.

KILDARE (1).

DUBLIN (11).

| Balbriggan (Ardgillan) *2nd gauge.*

MEATH (6).

| Drumconrath (Corstown House).

WESTMEATH (2).

Street [Edgeworthstown]—*Gauge leaking.* |

LOUTH (3).

LONGFORD (2).

| Cloondrah.

GALWAY (10).

ROSCOMMON (2).

Donamon (Castle Coote)—*Record ceased.* |

MAYO (5).

SLIGO (4).

LEITRIM (4).

| Carrigallen.

CAVAN (4).

Lough Sheelin (Arley) – *Record ceased.*
Killeshandra (Castle Hamilton)—*Not received.* |

MONAGHAN (2).

ARMAGH (6).

DOWN (10).

Mourne Mountains (Windy Gap)—*Not recvd.*
Newcastle (Fairleigh)—*Observer dead.*

ANTRIM (17).

Glenarm Castle—*No reply.*

LONDONDERRY (7).

Limavady.

TYRONE (3).

Dungannon (Rockdale)—*Record imperfect.*

DONEGAL (10).

Moville Rectory—*No reply.*

OBITUARY.

AGAIN we have to chronicle many losses—yet not many considering the number whence they are withdrawn, for, as usual, it is but about one in sixty; still, we cannot part with 56 of our fellow-workers without a feeling of thankfulness for their help, and of regret that it is all over. Yes, all over! but not all done with; the records which by daily care they compiled, have not merely been perpetuated as long as modern printing paper will hold together, but their records, both in the original MS. and in our complete record volumes, are as safe from fire and water as we can afford to make them.

The survivors of the 168 contributors to *English Rainfall*, 1860, have now been reduced to 15 by the deaths of Mr. T. J. Bewick, C.E., formerly of Allenheads, Northumberland,* and by that of Mr. Marth, formerly of Durham, but for many years past director of the observatory at Markree, county Sligo.

The deceased observers who have left records for 30 years or more have been, in the order of length of time,

37 years	...	Dr. Cruickshank, of Aberdeen.
35 ,,	...	Mr. Cooke, of Ormskirk.
33 ,,	...	Mr. Birkbeck, of Norwich.
33 ,,	...	Rev. T. Mackereth, of Eccles and Windermere.

We have heard the age at death of only 29 out of the 56 observers whose loss we have to record, and we find that, as usual, the age was very considerable—the youngest was 51, the oldest 88, the average being 72 years, and more than two-thirds were over 70.

* We should be very glad to have returns from there, or Bywell, or Alston, all now without an observer.

Observers Deceased to July, 1898.

NAMES AND STATIONS.	PERIOD OF OBSERVATION. DATE.	Perfect Yearly Records.
Anderson, The Rev. J. B., Dingle, Tralee, co. Kerry	1884–86, 89–94 T...	9
Anstruther, Sir W. C., Bt., Carmichael House, Thankerton, N.B.	1889–94	5
Baker, The Rev. R. S., Hargrave Rec., Kimbolton...	1890–97 imp T	7
Barclay, J. G., Esq., Leyton	1861, 63, C 65 imp –67 imp T 78–86 imp T	10
Barne, Col. St. John, Sotterley Hall, Wangford, Suffolk	1877, 79, 81–93, 95–97 C	18
Bere, R., Esq., Milverton, Somerset	C 1876 imp –97 C	21
Bewick, T. J., Esq., C.E., Allenheads, Northumberland	C 1852 imp –66 C	14
Binyon, J. B., Esq., Pit Farm, Cartmel	1861–63	14
Binyon, J. B., Esq., Black Rock, Cork	1870–90 T	
Birkbeck, W., Esq., Thorpe, Norwich	C 1865–97 T	33
Blyth, The Rev. E. H., Saltwood Rec., Hythe	1896–97	2
Bousfield, The Rev. G. B. R., Portsdown Road, W.	1893–96 T	4
Bradford, The Rt. Hon. the Earl of, Weston Park, Shifnal	1873–97	25
Bridgeman, The Hon. and Rev. J. R. O., Weston, Shifnal	C 1864 imp –84 T	20
Browne, Major A. H., Callaly Castle, Whittingham, Northumberland	1894–97	4
Burges, Mrs., The Ridge, Chipping Sodbury	1890–96 T	7
Cawdor, The Rt. Hon. the Earl of, Stackpole Court, Pembroke	C 1873–97 C	25
Christy, R., Esq., Watergate, Emsworth, Hants...	1890–97	8
Cooke, G., Esq., Aughton Springs, Ormskirk	C 1862 imp –97	35
Cowburn, Major, Dennel Hill, Chepstow	C 1886 imp –94 T	8
Cruickshank, Dr. A., Rose Street, Aberdeen	C 1860–96 T	37
Currie, Col. J. R., Grey's Lodge, Torquay	1887–97	11
Davies, E., Esq., Plas Dinam, Llandinam	1894–97	4
Davies, Major-Gen. Sir W. G., K.C.S.I., The Meadows, Claygate, Esher	1895 imp –97 T	2
Egmont, The Rt. Hon. the Earl of, Cowdray Park, Midhurst	1893–96 T	4
Finlay, Mr. John, Meldon Park, Morpeth	C 1871–96 T	26
Gorton, R., Esq., Cirencester	C 1879–96 T	18
Gossett, The Rev. C. H., Langton Herring, Weymouth	C 1878 imp –97 imp T	18
Halliday, W. H., Esq., Glenthorne, Lynmouth, Devon	C 1873 imp –97 C	24
Hames, J., Esq., Rotherby Hall, Leicester	C 1884 imp –97 C	13
Heath, D. D., Esq., Kitlands, Dorking	C 1852 imp –64 T	12
Holley, W. H., Esq., J.P., Oaklands, Okehampton, Devon	C 1870–97 C	28
Isaac, T., Esq., Maldon, Essex	C 1894–97 imp T	3

Observers Deceased to July, 1898—(*continued*).

NAMES AND STATIONS.	PERIOD OF OBSERVATION. DATE.	Perfect Yearly Records.
Kennion, Rev. R. W., Acle Rectory, Norfolk ..... Park Rd., Southboro', Tun. Wells	C 1865–93 T ..... C 1895 imp –96 T ...	28
Killey, P., Esq., Derby Square, Douglas, Isle of Man	C 1868 imp –96 T ...	28
Locke, Mr. W., Ravensdale School, Newry, Ireland	C 1887–95	19
Lowry, Col., Rockdale, Dungannon, Ireland	C 1875–97 imp	22
Mackereth, The Rev. T. .. .. Eccles, Manchester .... Woodlands Ter., Windermere	C 1861–78 imp T ... C 1888 imp–96 imp T	33
Malden, H. C., Esq., Crowborough, Sussex	1895–96 T	2
Malleson, The Rev. F. A., The Vicarage, Broughton-in-Furness	C 1872 imp –83 imp C 86 imp –97 T	21
*Marth, A., Esq., Observatory, Durham ..... Markree Observty., Collooney, Co. Sligo	1860–62 C ..... C 1870–97 C	30
Maxwell, Major, Glenlair, Dalbeattie, N.B.	1891–97	7
Milward, D. A., Esq. Tullogher, New Ross, Ireland Lavistown, Kilkenny, Ireland	C 1869–81 T ..... C 1882–97 T	29
Montgomery, Gen., C.S.I., Fort Royal, Rathmullan, Donegal	1894–97 T	4
Murray, C. M., Esq., The Firs, Ore, Hastings	C 1874 imp –86 T.....	12
Neumann, H., Esq., Winnington, Northwich ..... Wincham Hall, Northwich...	C 1869–88 imp T ... C 1888 imp –96 ...	26
Orde, Sir J. W. P. Campbell, Bt., Bingfield, Hexham Kilmory, Lochgilphead	C 1864–65 imp T ... C 1880–97 imp	18
Ransome, T., Esq., Hest Bank, Lancaster	C 1856 imp –76 imp 79–96 T	27
Redmayne, G., Esq., Brathay Hall, Ambleside ...	C 1873–81	9
Rigby, T., Esq., Gin Hall, Bury, Lancashire	1876–96 C	21
Rowcliffe, E. L., Esq., Hall Place, Cranleigh, Guildford	1878–97	20
Ryan, E. F., Esq., Alma, Wexford	1894–96 T	3
Seymour, The Rev. Canon, Newcastle, Co. Down...	1876–96 T	21
Spedding, Lady Jane, Mirehouse, Keswick	1887–96 C	10
Styring, F., Esq., Poole, Dorset	1883–96 T	14
Swayne, Major, Glastonbury.....	1885–96 C	12
Teague, H., Esq., St. Botolph's, Lincoln	1870–96 C	27

NOTE.—C indicates commencement of record and also its continuation, T its termination.

RAINFALL AND METEOROLOGY

OF

1897.

SYMBOLS EMPLOYED.

H.R.S.	Highland Railway Station.
H	Hail.
L	Lightning.
S	Snow.
T	Thunder.
TS	Thunderstorm.
TSS	Thunderstorms.

ON THE METEOROLOGY OF 1897.

WITH NOTES ON SOME OF THE PRINCIPAL PHENOMENA.

[These Notes should be read in conjunction with those on Heavy Rains in 1897.]

JANUARY.

1st.—*Hedsor* (III). Brilliantly fine. Max. temp. in sun 85°.—*Invershin* (XIX). T and L.

2nd.—*Meltham, Harewood Lodge* (IX). Aurora all the evening.—*Thixendale* (IX). Brilliant aurora.

8th—9th.—*Stamford, Easton* (III). R, H, and sleet.

9th.—*Alconbury* (III). S yielding ·26 in.—*Stamford, Duddington* (III). Welland in flood.—*Astle Hall* (VIII). Blowing hard from N.E. with sleet.—*Douglas, Victoria Road* (XI). N.E. gale; no English mail.

10th.—*Derby, Duffield Road* (VII). Two inches of S.

11th.—*Stamford, Duddington* (III). Floods unusually high.—*Kilkenny, Sion Villa* (XXI). Fog the entire day.

12th.—*Astle Hall* (VIII). Fog.

14th.—*Bloxworth Rectory* (V). S yielding ·15 in.

15th.—*Killiney, Cloneevin* (XXI). S fell and lay till 19th.

16th.—*Finchley, Etchingham Park* (I). S 1½ inches deep.—*Horsell, Lindisaye* (II) S yielding ·10 in.—*Erith, Crossness* (II). Heavy fall of S.—*St. Albans, The Grange* (III). S one inch deep.—*Corfe Castle, Furzebrook* (V). S.

16th—25th.—*Hillington School* (IV). S daily.

17th.—*Abington Pigotts* (III). Heavy S.—*Chelmsford, Springfield Place* (IV). S yielding ·15 in.—*Sudbury, Friars Street* (IV). S 5 inches deep.

18th—24th.—*Malham Tarn* (IX). S daily.

18th—31st.—*Logie Coldstone Manse* (XVII). S daily, except 20th and 23rd.

20th—25th.—*Worksop, Hodsock Priory* (VII). S daily.

21st—22nd.—*Ryde, Thornbrough* (II). S.

21st—23rd.—*St. Albans, The Grange* (III). S daily, about 7 inches deep on 23rd; some roads blocked.

21st—25th.—*Nottingham, Beeston Fields* (VII). S daily.

22nd.—*Finchley, Etchingham Park* (I). S much drifted; average depth, four inches.—*Farnham, Seale* (II). S yielding ·20 in.—*Horsell, Lindisaye* (II). S yielding ·11 in.—*Kensworth* (III). Great S storm; drifts 15 feet deep, roads and lanes blocked.—*Berkhampstead, Fairhill* (III). Heavy S.—*Hedsor* (III). N.E. gale, and much S.—*Oxford, Magdalen College* (III). Heavy fall of S.—*Oxford, St. Giles'* (III). Blizzard at 4 p.m.; one inch of S fell in about 20 minutes.—*Alconbury* (III). S yielding ·25 in.—*Bloxworth Rectory* (V). S yielding ·08 in.—*Clifton, Pembroke Road* (VI). Blizzard and darkness at 3 p.m.—*Gloucester, Lower Barton Street* (VI). Blizzard.—*Ross, The Graig* (VI). Blizzard at 2.30 p.m.—*Rotherby Hall* (VII). Three inches of S.—*Louth, Gospelgate* (VII). T, L and S.—*Findern* (VII). Blizzard from N.E. with six inches of S.—*Astle Hall* (VIII). Blowing a gale from N.E. all afternoon, and at times snowing hard and freezing; a regular blizzard. About 1 p.m., the dense black snow-cloud made it dark, so that lights were necessary.—*Aysgarth Vicarage* (IX). Violent squalls of S.—*Brampton, Denton House* (X). Strong E. to N.E. gale with S showers.—*Sronvar* (XVI). One inch of S.—*Killiney, Cloneevin* (XXI). S fell and lay till 29th.

22nd and 23rd.—*Birchington* (II). S yielding ·32 in.—*Henley, Assenton* (III). S.—*Horncastle, Bucknall* (VII). Fearful S storms with deep drifts.—*Hemingby* (VII). Gale with S.

22nd and 23rd.—Extremely heavy N.E. gale all along the coast from the Thames to the Orkneys. Tynemouth North pier seriously damaged. Many lives lost in the snow.

23rd.—*Kensington, Edith Road* (I). N.E. gale with S showers.—*Sheppey, Leysdown* (II). Severe S storms; depth on ground, four inches.—*Rochester, Hoo St. Mary* (II). Very severe blizzard from N.E. All roads not swept by the wind were blocked with S. It began in the early morning, and kept on till nightfall. The only worse day remembered was January 18th, 1881.—*Lewes, Saxonbury* (II). Heavy fall of S.—*Kings Langley* (III). S drifts 4 to 5 feet deep.—*Thorney, Wryde* (III). S drifts. Railway blocked and trains stopped at Wryde 6 or 7 hours.—*Rendlesham Hall* (IV). Strong N.E. wind with heavy S storms.—*Penzance, St. Clare* (V). H and sleet

23rd—25th.—*Thixendale* (IX). A blizzard.

24th.—*Ashurst, Stone Ness* (II). S yielding ·75 in.—*Stronvar* (XVI). One inch of S.

25th.—*Eltham, Cliefden* (II). T and S.—*Crossness* (II). S.W. to W. gale, with T, L and S.—*Astle Hall* (VIII). Gale from N.W. with driving S storms.—*Bolton, The Park* (VIII). Slight T and L.—*Llandefaelog-fach* (XI). Heavy S showers; country white.—*Douglas, Victoria Road* (XI). N.W. gale; boat over 8 hours coming from Liverpool.—*Watten, H.R.S.* (XIX). N.W. gale and heavy S.

25th and 26th.—*Markree Observatory* (XXII). S.

27th—*Revelstoke, Membland* (V). Two inches of S fell.—*Tavistock, Rose Villa* (V). An inch of S fell.

28th.—*Uxbridge, Harefield Park* (I). S yielding ·17 in.

29th.*—*Meltham, Harewood Lodge* (IX). A very fine zenithal or prismatic halo at 10·45 a.m., and again at 0·45 p.m. Sun about 18° above the horizon, and halo on the same meridian about 39° from the sun; about a quarter of the circle showed and the colours were well displayed, with the red nearest the sun.

30th.—*Craigend Castle* (XV). Three-and-a-half inches of S.—*Stronvar* (XVI). Three inches of S.—*Watten, H.R.S.* (XIX). Gale from E. with six to eight inches of S. Roads blocked.

31st.—*Henley, Assenton* (III). S.—*Ballinluig* (XVI). S three inches deep.—*Invershin* (XIX). Heavy fall of S.

FEBRUARY.

1st.—*Meltham, Harewood Lodge* (IX). S began to fall about 8 p.m. and continued nearly all the night. At 9 a.m. on 2nd the depth from several measurements, with very little variation, was $6\frac{1}{4}$ inches. Determination of the amount of water by taking an inverted cylindrical section on a level place gave ·48 in. of water.—*Llandefaelog-fach* (XI). Two-an-a-half inches of S.

1st and 2nd.—*Lexden, Hill House* (IV). S melting rapidly.

1st—3rd.—*Baldersby* (IX). S.

1st—5th.—*Slough, Upton* (III). R 1·92 in., followed by floods, which culminated on the night of 7th. The melting of the S on the Marlow Hills was greatly responsible for the flood.—*Loughborough, Forest Road* (VII). R 1·96 in., causing a flood on 5th and 6th.

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* See also *Quar. Jour. R.Met.Soc.*, Vol. XXI., p. 200.

1st—6th.—*Lowthorpe, The Elms* (IX). S daily.

2nd.—*Crossness* (II). Heavy fall of S at 7 p.m.—*Oxford, Magdalen College* (III). Heavy shower of S.—*Nottingham, Beeston Fields* (VII). Four inches of S.

2nd and 3rd.—*Coventry, Priory Row* (VI). S yielding ·57 in.—*Colmonell* (XIV). Half-an-inch of S.

2nd—4th.—*Upminster Hall* (IV). S daily.

3rd.—*Finchley, Etchingham Park* (I). About an inch of wet S.

3rd and 4th.—*Lilliesleaf, Riddell* (XII). S.

4th.—*New Galloway, Glenlee* (XII). Heavy fall of S.

4th—14th.—*Cookham Vicarage* (II). Thames in flood; highest on 7th.

5th.—*Blisworth, Grafton House* (III). Heavy R all day, which with the thaw of S made the largest flood for several years.—*Duddington* (III). Welland in high flood.—*Cheltenham* (VI). Floods out.—*Ballinluig* (XVI). An inch of S on the ground.

5th—7th.—*Lexden, Hill House* (IV). River very high; much land under water; the flood on the 6th being the highest for many years.

6th.—*Stretham Ferry* (III). The floods caused the bank to break in the Cottenham Fen district.—*Rotherby Hall* (VII). The river Wreake rose 7 ft. 2 in., causing the highest flood since May 17th, 1889, when it rose 6 ft. 4 in.

7th.—*Nottingham, Beeston Fields* (VII). Big flood in the Trent valley.

8th.—*Stretham Ferry* (III). The floods caused the bank to crack open 1 foot wide and 20 yards long at Upware in the Waterbeach district.

9th to 11th.—Serious floods in many parts. At *Braintree* the river is said to have been fuller than for twenty years. At *Bungay* the height is said to have been exceeded only once for 60 years (in 1879).

"There was a novel scene yesterday, February the 8th, at Summerlea Farm, right in the midst of the deepest of the flood at *Maidenhead*, where Mr. H. D. Tilly conducted a sale by auction of live and dead farming stock, growing root crops, &c. Those attending the sale had to proceed in punts and vehicles through acres of water. The sale was on a part of the farm above flood level, and here on this island the lots were offered, and although the crops were under water, these and other lots, visible and invisible, were sold. Never, probably, has a farm sale been successfully conducted under such novel and adverse circumstances."—*Morning Advertiser*, Feb. 9th.

There was considerable flooding at *Windsor*, *Eton*, and other places on the Thames; also in *Northampton*, *Huntingdon*, *Cambridge*, *Norfolk*, *Leicester*, *Lincoln* and other counties.

20th.—*Southport*, *Hesketh Park* (VIII). Strong W.S.W. gale at night, in conjunction with a high tide, causing damage on the sea-front.

24th—26th.—*Lilliesleaf*, *Riddell* (XII). S.W., W. and N.W. gales.

25th.—*Pen-y-cwm* (XI). T.—*Edinburgh*, *Blacket Place* (XIII). S.W. gale. At 9 p.m., although the cloud was entered 0, the air was charged with moisture, R falling heavily.

26th.—*Invershin* (XIX). T.

28th.—*Derry Castle* (XX). S on the hills.

MARCH.

1st.—*Seathwaite Vicarage* (VIII). S on the fells.—*Llandefaelog-fach* (XI). The Beacons white with S.—*Stronvar* (XVI). Two inches of S.—*Drumnadrochit* (XVIII). About an-inch-and-a-half of S.

1st and 2nd.—*Mullingar* (XXI). S.—*Enniscoe* (XXII). S.

1st—3rd.—*Hurdlestown* (XX). R, H and S.

1st—4th.—*Woodlawn Gardens* (XXII). S daily.

1st—17th.—*Malham Tarn* (IX). S daily, except 6th and 7th.

2nd.—*Stamford*, *Easton* (III). S, R and H.—*Wellington*, *The Avenue* (V). Heavy S. gale.—*Clifton*, *Pembroke Road* (VI). Violent S.E. to S.W. gale.—*Findern* (VII). Very stormy from S.W.—*Edinburgh*, *Blacket Place* (XIII). W. gale.—*Lawderdale* (XXII). N.W. gale and S.

2nd and 3rd.—*Kensington*, *Edith Road* (I). Violent S.W. gale.—*Westbourne Grove* (I). Severe S.W. gale.—*Crossness* (II). High S.E. wind and very low tide at 8.30 a.m. on 3rd.—*Itchen Stoke* (II). R began about 4 p.m. on 2nd, with wind backing and increasing to a gale, and 1·17 in. of R fell; the gale continued on 3rd from N.W., increasing in force, and from 10 a.m. till noon S fell. Eight large trees were blown down in the village, and at 10.15 a.m. an old building collapsed.—*Wareham*, *Binnegar Hall* (V). Heavy gale, doing much damage.—*Abergwesyn Vicarage* (XI). H, S, sleet and R; 2·58 in. in the two days.—*Douglas*, *Victoria Road* (XI). Whole gale from S.W.

2nd—4th.—*Middleton Chirbury* (VI). S daily.

3rd.*—*Chiddingfold* (II). During the gale, sea-salt (distance from

* See also *Met. Mag.* March, 1897, p. 23.

sea nearly 50 miles) was deposited on windows facing S.S.W., which windows had been cleaned the day before.—*Hythe* (II). S and H.—*Birchington, Thor* (II). Heavy S.W. gale.—*Angmering* (II). Hurricane; about 200 elm trees blown down, and many buildings damaged. The highest pressure of wind was about 10 a.m.—*Lewes, Saxonbury* (II). Heavy gale from W. Many fine trees destroyed.—*Hedsor* (III). W. gale; squalls of S.—*Alderbury* (V). Furious gale; hundreds of trees blown down.—*Mildenhall* (V). Sleet and T.—*Blandford, Whatcombe* (V). Strong N.W. wind; trees blown down. S.—*Instow* (V). Tremendous gale; the heaviest known for many years.—*Wellington, The Avenue* (V). Violent W.N.W. gale; S.—*Clifton, Pembroke Road* (VI). S storm at 9 a.m. and N.W. gale all day.—*Ross, The Graig* (VI). Heavy gale; probably the strongest since that of the same date in 1818.—*Llanfrechfa Grange* (XI). Heavy W. gale, with T, L, H and sleet.—*Dowlais, Gwernllwyn* (XI). Blizzard; heavy S and R.—*Haverfordwest* (XI). A gale of exceptional violence.—*New Ross, Longraigue* (XXI). Much S and H.

3rd and 4th.—*Henley, Assenton* (III). Strong S.W. gale.—*Chippenham, Lacock* (V). S.—*Cork, Wellesley Terrace* (XX). N.W. gale with S showers, with T and L on the latter day.—*Miltown Malbay* (XX). Stormy with S and H.

3rd—5th.—*Sheepstor Vicarage* (V). Hurricane with H and S.

4th.—*St. Albans, The Grange* (III). TS and H from 1.30 to 2 p.m.—*Datchworth Rectory* (III). T.—*Hedsor* (III). T and L at 1.30 p.m., with enormous H stones.—*Oxford, Magdalen College* (III). TS at 2 p.m.—*Oxford, St. Giles'* (III). Sharp TS with H.—*Stamford, Easton* (III). H and sleet.—*Odsey* [*Royston*] (III). TS and H.—*Little Saxham* (IV). H, T and L about 3 p.m.—*Thixendale* (IX). S, T and L with H at 4 p.m.—*Ulpha Vicarage* (X). Heavy S and R storms.—*Dowlais, Gwernllwyn* (XI). S, R, L and T.—*Stronvar* (XVI). Three inches of S.

5th.—*Worcester Park* (II). Vivid L in S.W. 9 to 10.15 p.m.—*Sudbury, Friars Street* (IV). L at night.—*Ballinluig* (XVI). S three inches deep.

6th.—*Broxbourne* (III). T, S, H and R.—*Hedsor* (III). L at night.

8th.—*Watten, H.R.S.* (XIX). S.E. gale.

9th—11th.—*Mullingar* (XXI). S and H.

10th.—*Kensington, Edith Road* (I). T about 1.30 p.m. and heavy shower of soft H.—*Croydon, Duppas House* (II). R, H, S and T.—*Croydon, Waddon New Road* (II). T and H.—*Datchworth Rectory* (III).

T.—*Hedsor* (III). H at intervals.—*Further Barton* (VI). Some H and distant T.—*Llandefaelog-fach* (XI). Frequent heavy H showers.

11th.—*Hurdlestown* (XX). S and R.

12th.—*Bishops Cannings* (V). H and S.—*North Cadbury Rectory* (V). Wonderfully brilliant lunar halo at 8.30 p.m.

13th.—*Abergwesyn Vic.* (XI). H and S.—*Castle Lough* (XX). Hills white with S.—*Hurdlestown* (XX). R and S at night, and the hills white on 14th.

14th.—*Ashburton, Druid* (V). Heavy R and S.—*Rotherby Hall* (VII). Slight flood.—*Hemingby* (VII). S.—*Findern* (VII) TS.—*Ulpha Vicarage* (X). S on the hills.—*Watten, H.R.S.* (XIX). Stormy from S.E. with S.

14th and 15th.—*Inverbraan* (XVI). S.

15th.—*Stamford, Duddington* (III). T, L and heavy showers.—*East Layton* (IX). Severe T and L.—*Edinburgh, Blacket Place* (XIII). S.E. gale.

16th.—*Abington Pigotts* (III). Fine parhelion.—*Wellington, The Avenue* (V). Gale with H, L and T.—*Further Barton* (VI). T and L.—*Thixendale* (IX). T.—*Dowlais, Gwernllwyn* (XI). Sleet and T. Very rough westerly winds.

16th and 17th.—*Chippenham, Lacock* (V). T.—*Miltown Malbay* (XX). Gale with squalls of H.

17th.—*Oxford, Magdalen College* (III). T and L at 9 p.m.—*Oxford, St. Giles'* (III). Heavy H storm 9 p.m. T and L.—*Ashburton, Druid* (V). TS with torrents of R from 7 p.m. to 7.20 p.m. Lunar rainbow at 7.40 p.m.—*Penzance, St. Clare* (V). T, L and H.—*Wellington, The Avenue* (V). Gale with T and L.—*Stowell Rectory* (V). T and L in evening.—*Long Ashton* (V). Gale and TS.—*Clifton, Pembroke Road* (VI). TS and squalls of R and H at 8 p.m.—*Ross, The Graig* (VI). TS at 7.30 p.m. with drenching R.—*Worcester, Diglis Lock* (VI). Heavy TSS.—*Llanfrechfa Grange* (XI). L and T at 7 p.m., and violent squall with H for 20 minutes.—*Treherbert, Tyn-y-waun* (XI). Heavy R with T and L.—*Dowlais, Gwernllwyn* (XI). TS and 1·05 in. of R.—*Kilkenny, Sion Villa* (XXI). Heavy fall of H.—*Antrim, The Manse* (XXIII). T.

17th and 18th.—*Stamford, Easton* (III). T and L.

18th.—*Birchington, Thor* (II). Severe T and L at 11 a.m.—*Hemingby* (VII). Very stormy with T.—*Nottingham, Beeston Fields* (VII). H storm at 11.30 a.m.; ·14 in. fell in 15 minutes.—*Findern* (VII). TS.—*Pen-y-cwm* (XI). T and H.

19th.—*Astle Hall* (VIII). Gale from W.N.W.

21st.—*Kilkenny, Sion Villa* (XXI). Thick fog.

22nd.—*Ross, The Graig* (VI). Solar halo.

23rd.—*Lawderdale* (XXII). Gales from W.

24th.—*Edinburgh, Blacket Place* (XIII). W. gale.

26th.—*Westbourne Grove* (I). S.W. gale.—*Oxford, St. Giles'* (III). L.—*Cork, Wellesley Terrace* (XX). S.W. gale.—*Kilkenny, Sion Villa* (XXI). Heavy gale.

27th.—*Southport, Hesketh Park* (VIII). A fairly bright parhelion in the afternoon.

28th.—*Drumnadrochit* (XVIII). Gale with S and H.

29th.—*Watten, H.R.S.* (XIX). Stormy from N.W., with R, sleet and S.

30th.—*Ross, The Graig* (VI). Sharp frost; plants much injured.—*Colmonell* (XIV). An inch-and-a-quarter of S.

31st.—*Capel, The Cottage* (II). TS.—*Croydon, Waddon New Road* (II). T and S.—*Alton, Ashdell* (II). TS and 1·02 in. of R.—*Datchworth Rectory* (III). S and H.—*Mildenhall* (V). S.—*Taunton, Halse* (V). S—*Thixendale* (IX). S.—*Douglas* (XI). S and H.—*Derry Castle* (XX). S.

APRIL.

1st.—*Ealing, Gordon Road* (I). S.—*Keston Tower* (II). S.—*Hedsor* (III). Heavy fall of S from 8 to 10 p.m.—*Epping* (IV). S.—*Rendlesham Hall* (IV). S and sleet.—*Swaffham* (IV). S.—*Bishops Cannings* (V) A little S on the hills.—*Blandford, Whatcombe* (V). S.—*Ashburton, Druid* (V). S.—*Taunton, The Mount, Halse* (V). S.—*Clifton, Pembroke Road* (VI). Hills covered with S.—*Further Barton* (VI). S.—*Astle Hall* (VIII). R and S at times. A storm of T and sleet came up from the N. about 5 p.m.—*Bolton, The Park* (VIII). S—*Treherbert, Tyn-y-waun* (XI). Frost, S and H.—*Abergwesyn* (XI). S.—*Colmonell* (XIV). S showers.—*Drumnadrochit* (XVIII). S and hard frost.—*Watten* (XIX). S.—*Cork, Wellesley Terrace* (XX). Slight fall of S.—*Killarney, Woodlawn* (XX). N.E. gale; mountains covered with S.—*Broadford, Hurdlestown* (XX). H and S at 6 p.m.—*Killiney, Cloneevin* (XXI). S.

1st and 2nd.—*Hythe* (II). S.

2nd.—*Birchington, Thor* (II). S at mid-day.— *Ross, The Graig* (VI). Sharp H storm.—*Hemingby* (VII). S.—*Llandefaelog-fach* (XI). The

Beacons white.—*Broadford, Hurdlestown* (XX). Hills white.—*Miltown Malbay* (XX). S and sleet.

2nd and 3rd.—*Derry Castle* (XX). H.

3rd.—*Douglas* (XI). Whole E. gale. Mail steamer unable to lie at Douglas.

4th.—*Capel, The Cottage* (II). TS.—*Stotfold, Baldock* (III). S.—*Hemingby* (VII). S at night.

4th and 5th.—*Abergwesyn* (XI). S.

5th.—*Mullingar, Belvedere* (XXI). S.

6th.—*Oxford, Elsfield* (III). S.—*Stotfold, Baldock* (III). S.—*Bishops Cannings* (V). A little S.—*Abbots Leigh* (V). S.—*Great Barrington* (VI). S.—*Middleton Chirbury* (VI). S.—*Llandefaelog-fach* (XI). Heavy S showers.—*Rhiwbryfdir* (XI). S.

6th and 7th.—*Coventry, Kingswood* (VI). S.

7th.—*Croydon, Waddon New Road* (II). T and S.—*Crossness* (II). TS at 3 p.m., and ·53 in. of R.—*Maidenhead, Castle Hill House* (II). Severe TS; about 2 p.m. a Lombardy poplar was struck, a large branch being broken off.—*Hedsor* (III). Severe T and L with a heavy fall of S and R mixed, and high wind, from 1 p.m. to 4 p.m. Sharp frost at night.—*Epping* (IV). S.—*Mildenhall* (V). T and L.—*Blandford, Whatcombe* (V). Heavy H storm; very large H stones.—*Ashburton, Druid* (V). H and S showers.

9th.—*Birchington, Thor* (II). N.W. gale.

11th.—*Wellington, The Avenue* (V). S. gale.

13th.—*Cartmel, Broughton Hall* (VIII). S.—*Douglas* (XI). S.W. gale.

14th.—*Ross, The Graig* (VI). Sharp H storms.—*Bolton, The Park* (VIII). T and L.—*New Galloway, Glenlee* (XII). S showers.—*Glasgow, Queen's Park* (XIV). T, L, R, H and sleet.—*Colmonell* (XIV). S showers.—*Stronvar* (XVI). S showers and high wind.—*Broadford, Hurdlestown* (XX). A little S.

14th and 15th.—*Colmonell* (XIV). T.

14th—16th.—*Lexden* (IV). T daily and L and H on 16th.—*Antrim, The Manse* (XXIII). H daily.

15th.—*Birchington, Thor* (II). H storm.—*Rendlesham Hall* (IV). Storm; T, L and H.—*Blandford, Whatcombe* (V). H storm.—*Douglas* (XI). S.W. gale; steamers delayed.

16th.—*Northampton, Sedgebrook* (III). Squalls with T and H.—*Odsey* [*Royston*] (III). TS.—*Brampton, Denton House* (X). T and H.—*Douglas* (XI). Furious S.E. gale.

16th and 17th.—*Upper Midhope* (IX). Severe H storms.

17th.—*Emsworth, Redlands* (II). S.W. gale.—*Findern* (VII). T and H.

18th.—*Ross, The Graig* (VI). River Wye in high flood (nearly 11 feet).

20th.—*Ross, The Graig* (VI). Solar halo and coloured mock sun at 5 p.m.—*Southport, Hesketh Park* (VIII). A parhelion in afternoon.

21st—May 25th.—*Otterbourne, W.W., Shawford* (II). Partial drought for 36 days. R ·33 in.

21st—May 26th.—*Burghill Court* (VI). Partial drought for 36 days. R ·34 in.

22nd—May 24th—*Duddington* (III). Partial drought of 33 days, with ·25 in. of R.

22nd—May 26th.—*Stroud, Stanley Park* (VI). Partial drought.

26th.—*Torquay, Cary Green* (V). In 5 hours 1·26 in. of R fell.—*Ashburton, Druid* (V). L.

27th.*—*Capel, The Cottage* (II). TS.—*Clapham Park* (II). Sharp TS, 1·18 in. of R falling in an hour, followed by further R at night, bringing the total up to 1·38 in.—*Chichester, West Dean* (II). Severe TS; house damaged by L.—*Upminster Hall* (IV). Heavy TS.—*Church Stretton* (VI). Shade max. 71°, followed by a TS.

28th.—*Maidenhead, Castle Hill House* (II). TS and heavy R, ·36 in. falling in 40 minutes.—*Oxford, Magdalen College* (III). TS in evening.—*Oxford, St. Giles'* (III). Sharp TS with H from 7 to 8 p.m.—*Stamford, Duddington* (III). L.—*Shenfield* (IV). TS.—*Lexden* (IV). T and L.—*Rendlesham Hall* (IV). T and R.—*Swaffham* (IV). TS.—*Devizes, Wilts Co. Asylum* (V). R, ·50 in. falling in 20 minutes.—*Bishops Cannings* (V). TS at 6 p.m.—*Ledbury, Putley Court* (VI). Remarkable storm of R and H, ·52 in. fell in less than 15 minutes, and quite as much must have bounced out of the gauge. Very hard H stones, and wholesale destruction of fruit bloom and foliage.—*Salt Vicarage* (VI). Exceptional storm; 1·04 in. of R falling between 11.45 a.m. and 0.45 p.m., with distant T. The storm moved from S.W. to N.E.—*Cheadle, The Heath House* (VI). T and L at 0.15 p.m.—*Astle Hall* (VIII). TS about noon.

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* See also *Met. Mag.*, May 1897, p. 50, and *Quar. Jour. R.Met.Soc.*, Vol. XXI., p. 298.

MAY.

3rd.—*Astle Hall* (VIII). TS in afternoon and heavy H storm.—*Drummore* (XIII). TS.—*Stronvar* (XVI). S showers.—*Ballinluig* (XVI). S and sleet.—*Ballinamore, Lawderdale* (XXII). S.W. gale.

3rd and 4th.—*Abergwesyn Vicarage* (XI). H.

4th.—*Nenagh, Castle Lough* (XX). S.W. gale.—*Crossmolina, Enniscoe* (XXII). H.

5th.—*Oxford, Magdalen College* (III). TS in afternoon.—*Oxford, St. Giles'* (III). T and H.—*Tavistock, Rose Villa* (V). H at 4 p.m. Solar halo at 7.30 p.m.—*Clifton, Pembroke Road* (VI). H storm.—*Bolton, The Park* (VIII). H.—*Llanfrechfa Grange* (XI). T 2.30 p.m.—*Treherbert, Tyn-y-waun* (XI). T and H.—*Drumnadrochit* (XVIII). Hills snow-clad down to 700 feet.

7th.—*Capel, The Cottage* (II). TS.

7th—24th.—*Cork, Villa Franca* (XX). Absolute drought.

8th—24th.—*Templeudigan, Ballindoney* (XXI). Absolute drought for 17 days.—*Killiney, Cloneevin* (XXI). Absolute drought.—*Kilkenny, Sion Villa* (XXI). Absolute drought for 17 days.

8th—25th.—*Otterbourne, W.W. Shawford* (II). Absolute drought for 18 days.

9th—26th.—*Dowlais, Gwernllwyn* (XI). Absolute drought for 18 days.

10th.—*Sudbury, Friars Street* (IV). S.—*Otterford, Otterhead* (V). T.—*Abergwesyn Vicarage* (XI). H.—*Douglas* (XI). N.W. gale; H; much damage to foliage and fruit blossom.

10th and 11th.—*Lowthorpe, The Elms* (IX). S.—*Forres, H.R.S.* (XVII). Showers of H and S.

10th—24th—*Caerwnon* [*Builth*] (XI). Absolute drought for 14 days.

11th.—*Birchington, Thor* (II). H storm at 5 p.m.—*Chichester, West Dean* (II). S.—*Henley-on-Thames, Northfield House* (III). S.—*Stotfold, Baldock* (III). S.—*Colchester, Lexden* (IV). S at 4 a.m.—*Further Barton* (VI). H and S.—*Middleton Chirbury* (VI). S.—*Horncastle, Hemingby* (VII). Sleet.—*Bolton, The Park* (VIII). Distant T.—*Thixendale* (IX). Ground covered with S.—*Wolsingham* (X). S.—*New Galloway, Glenlee* (XII). T, L and heavy H shower.—*Galway, Queen's College* (XXII). H showers.

11th and 12th.—*Abergwesyn Vic.* (XI). Frost.

12th—*Abinger Hall* (II). Sharp frost, doing much damage to crops and fruit.—*Odsey* [*Royston*] (III). S.—*Rendlesham Hall* (IV). H

showers.—*Hawkedon Rectory* (IV). S.—*Ashburton, Druid House* (V). Flakes of S at 10.30 a.m.—*Clifton, Pembroke Road* (VI). Slight shower of sleet in morning.—*Llanfrechfa Grange* (XI). H storm.—*Llandefaelog-fach* (XI). S, sleet, R and H.

12th—13th.—*Bishops Waltham, Northbrook House* (II). During the night the temp. fell to 22°, doing much damage.

13th.—*St Albans, The Grange* (III). Slight S in morning.—*Hedsor* (III). Sharp frost. Min. temp. 26°.

16th.—*Hythe* (II). TS at 11 p.m.—*Birchington, Thor* (II). T and L at night.—*Sheppey, Leysdown* (II). Short TS at night.—*Datchworth Rectory* (III). Frost.

17th.—*Capel, The Cottage* (II). TS.—*Douglas* (XI). N.E. gale, blackening and blighting everything.

21st.—*Tavistock, Rose Villa* (V). L in S. at 11.38 p.m.

24th.—*Royston, Therfield* (III). Absolute drought for 20 days ended.

25th.—*Throcking Rectory* (III). Absolute drought for 15 days ended.—*Oxford, Magdalen College* (III). T in afternoon.—*Rendlesham Hall* (IV). T.—*Cheltenham, Southam Villa* (VI). T.

26th and 27th.—*Northampton, Sedgebrook* (III). T.

27th.—*Seathwaite Vicarage* (VIII). T and L at night.—*Leeds, Elmet Hall* (IX). TS with H.—*New Galloway, Glenlee* (XII). T.—*Cork, Wellesley Terrace* (XX). T, H and R.

27th and 28th.—*Knaresborough, Farnham* (IX). T.—*Ulpha Vicarage* (X). TSS.

28th.—*Thorney, Wryde* (III). TS; much damage done.—*Normanton-on-the-Wolds* (VII). In 19 minutes ·28 in. of R fell.—*Bolton, The Park* (VIII). T and L from 3 to 4.30 p.m.—*Southport, Hesketh Park* (VIII). TSS.—*Thixendale* (IX). TS.—*Douglas* (XI). Heavy R. S.W. gale from 11 p.m.

29th.—*Leeds, Elmet Hall* (IX). TS.—*Stronvar* (XVI). T and heavy showers.—*Caher, Duneske* (XX). H showers.—*Derry Castle* (XX). H and distant T.—*Broadford, Hurdlestown* (XX). Severe H showers all day.

30th.*—*Finchley, Etchingham Park* (I). L and T between 7 and 8 p.m.—*Wallington* (II). T and L.—*Hythe* (II). TS at night.—*Birchington, Thor* (II). T and L in evening.—*Bromley, Widmore Road* (II). In 45 minutes ·59 in. of R fell.—*Eltham, Cliefden* (II). T and ·74 in. of R.—*Crossness* (II) Heavy TS at 8 p.m.—*Lewes, Bedford Lodge* (II). TS and H.—*Crowborough, The Observatory* (II). In 4

* See also *Met. Mag.*, June 1897, p. 65.

minutes ·30 in. of R fell.—*Wadhurst, Lower Cousley Wood* (II). Heavy H storm for 10 minutes at 7.5 p.m., yielding ·20 in. Much damage to fruit trees.—*Throcking Rectory* (III). TS with ·68 in. of R.—*Duddington* (III). TS. A lad driving from Duddington to Crowland was killed by L—*Colchester, Surrey Villa* (IV). In about 1 hour ·30 in. of R fell.—*Colchester, Lexden* (IV). Intense TS, ·19 in. of R fell between 8.36 and 8.39 p.m.—*Sudbury, Friars Street,* TS with vivid L. —*Rendlesham Hall* (IV). T.—*Little Saxham* (IV). Very vivid L between 8 and 9 p.m.—*Swaffham* (IV). TS.—*Horncastle, Hemingby* (VII). TS at night.—*Astle Hall* (VIII). Heavy TS in evening.—*Thixendale* (IX). Slight TS.—*Haverfordwest* (XI). In 15 minutes ·35 in. of R and H fell.—*Stronvar* (XVI). T at 11 a.m.

30th and 31st.—*Westbourne Grove* (I). T and L.—*Capel, The Cottage* (II). TSS.—*Broxbourne* (III). TSS.—*Stamford, Easton* (III). T and L.—*Odsey* [*Royston*] (III). TSS.

31st.—*Chichester, West Dean* (II). Heavy TS.—*Northampton, Sedgebrook* (III). Squally with T.—*Uttoxeter, Brook House* (VI). T.—*Tuam, Gardenfield* (XXII). T, L and ·20 in. of R in about 10 minutes.

JUNE.

1st.—*Kensington, Edith Road* (I). TS at 4 a.m.—*Finchley, Etchingham Park* (I). L and T between 3 and 4.30 a.m.—*Emsworth, Redlands* (II). Two TSS in early morning.—*St. Albans, The Grange* (III). TS early in the morning.—*Hedsor* (III). TS and heavy R at 4 a.m.—*Stamford, Duddington* (III). TS.—*Tavistock, Rose Villa* (V). Solar halo and parhelia 7.30 to 7.40 p.m.—*Stroud, Upfield* (VI). In 2 hours ·54 in. of R fell.—*Cheadle, The Heath House* (VI). T, L and heavy storm at 11 a.m.—*Findern* (VII). TSS all the morning.—*Astle Hall* (VIII). T, L and heavy R more or less all day.—*Bolton, The Park* (VIII). T and L.—*Grange-over-Sands, Belmont* (VIII). Four TSS.—*Seathwaite Vicarage* (VIII). TS.—*Upper Midhope* (IX). In 5 hours 1·09 in. of R fell—*Meltham, Harewood Lodge* (IX). TSS from 8.55 to 10.30 a.m. Violet L.—*Knaresborough, Farnham* (IX). T and H.—*Ulpha Vicarage* (X). TSS.—*Brampton, Denton House* (X). Sharp TS from 9.45 p.m. to 11 p.m.

1st and 2nd.—*New Galloway, Glenlee* (XII). T and L.

1st—3rd.—Accidents by L were numerous on these days. Only one death of a human being is reported, but many cattle, houses and

trees were struck. One unusual event should be mentioned, viz., that—

"Soon after 6 a.m. on June 3rd, a singular sight was witnessed in *Kensington Gardens*, lightning having set fire to the top of a large tree, which, notwithstanding the rain, was blazing furiously. Firemen were called up from the *Kensington* station, but found, upon their arrival, that some strangers had got a private hydrant to work, by which means the flames were put out."

2nd.—*Glasgow, Queen's Park* (XIV). Great storm of T, L and R.—*Stronvar* (XVI). T and L.

5th.—*Dowlais, Gwernllwyn* (XI). R ·88 in.; ·81 in. falling in 30 minutes, from 2 to 2·30 p.m.

6th.—*Capel, The Cottage* (II). TS.—*Oxshott* (II). TS. In 15 minutes ·48 in. of R fell.—*Worcester Park* (II). In 40 minutes ·34 in. of R fell.—*Bickley, Elmhurst* (II). R 1·35 in., of which an inch fell in 20 minutes.—*Bromley, Widmore Road* (II).—Heavy TS; 1·10 in. of R fell in 30 minutes, with a total of 1·46 in. in 24 hours.—*Chislehurst, Foxbury* (II). The early part of the day was very warm and sultry; between 3 and 4 p.m. it became almost dark; R and H then commenced in torrents, and within three-quarters of an hour 1·53 in. had fallen. All low-lying places were flooded, as no drains could carry off the water as fast as it descended. A fine oak was struck by L, the trunk being stripped of bark and split in twain.—*Sidcup, Hatherley Road* (II). For more than two hours before the storm broke, distant T was heard at intervals; a little before 3 p.m. L was frequent and vivid, and intense darkness came over. R and a little H began to fall at 2.50 p.m., and before 3.20 p.m. 1·23 in. had fallen. The National Schools were struck by L and considerable damage was done.—*Colchester, Lexden* (IV). TS.—*Sudbury, Friars Street* (IV). Heavy TS.

8th.—*West Bromwich* (VI). R fell continuously for 16 hours.

8th and 9th.—*Carisbrook, Rainsgrove* (II). T.

9th.—*Kensington, Edith Road* (I). The coldest day recorded in June. Max. temp. 52°·9.

11th.—*Capel, The Cottage* (II). TS.—*Penrith, Greystoke* (X). A well defined helm bar extending from Helvellyn to Saddleback all the afternoon and evening.—*Kilkenny, Sion Villa* (XXI). T and L.—*Killiney, Cloneevin* (XXI). TS.

12th.—*Cork, Wellesley Terrace* (XX). T and L.—*Templeudigan, Ballindoney* (XXI). Severe TS with the most vivid L seen for many years. It began at 7.30 p.m. and lasted till 9.10 p.m.

13th.—*Hedsor* (III). W. gale ; heavy R.—*Tavistock, Rose Villa* (V). Parhelia 6.55 to 7 p.m.—*New Galloway, Glenlee* (XII). T, L and heavy R.—*Drummore* (XIII). TS.

14th. —*Stronvar* (XVI). T and L.

15th.—*Buchlyvie, The Manse* (XV). Heavy R, 2·00 in.—*Buncrana, Rockfort* (XXIII). R 1·73 in., the greatest fall in any day during 30 years.

15th and 16th.—*Douglas, Victoria Road* (XI). Hurricane from W. and W.N.W. Trees blown down and shrubs uprooted.—*Blairingone Manse* (XVI). R began at 5 p.m. on 15th and continued till 3 p.m. on 16th, yielding 2·53 in. in 22 hours.—*Dalnaspidal* (XVI) S, R and high wind.

15th and 16th.—Much damage by floods in the S. and S.W. of Scotland.

16th.—*Astle Hall* (VIII). Gale from N.W.—*Meltham, Harewood Lodge* (IX). Severe gale. The worst June day for 20 years.—*Thixendale* (IX). Gale blowing down trees and making a wreck of the tents at York flower show.—*Douglas, Victoria Road* (XI). Remarkable hurricane, and great havoc among foliage and fruit.—*Lochwinnoch, Garthland* (XIV). Heavy R lasting 18 or 19 hours, principally at night ; 3·29 in.

17th and 18th.—*Wellington* (V). Gales from S. and S.W.

18th.—*Rendlesham Hall* (IV). N.W. gale.—*Tavistock, Rose Villa* (V). N.W. gale.—*Southport, Hesketh Park* (VIII). N.W. gale.—*Llanfrechfa Grange* (XI). Strong gale from W.

19th.—*Invershin* (XIX). S on the hills.

20th.—*Miltown Malbay* (XX). T and L.

20th—August 4th.—*Duddington* (III). Partial drought for 46 days. R ·28 in.

20th—August 6th—*Burton Latimer Rectory* (III). Partial drought. R only ·14 in.

22nd.—*Cahir, Duneske* (XX). Vivid L at night.—*Broadford, Hurdlestown* (XX). T and L.—*Tuam, Gardenfield* (XXII). T and L at night.

22nd and 23rd.—*Miltown Malbay* (XX). T and L.

23rd.—*Waterville, Iveragh Lodge* (XX). Between 10 a.m. and 1 p.m. ·75 in. of R fell.—*Killarney* (XX). In about 50 minutes (between 11 a.m. and noon) ·55 in. of R fell.

24th*.—*Ealing* (I). In 1 hour 1·40 in. of R fell.—*Ealing, Gordon*

* See also *Met. Mag.*, July 1897, p. 81, and *Essex Naturalist*, Vol. X., p. 112.

Road (I). About 1.45 to 2 p.m. a tornado occurred, with blinding dust, and darkness almost as of night. Between 4.45 p.m. and 6 p.m. 1·40 in. of R fell.—*Ealing, Castle Bar Road* (I). In 1 hour 30 minutes 1·37 in of R fell.—*Kensington, Edith Road* (I). The warmest day recorded in June. Max. temp. 86°·3. Violent TS from 4.30 p.m. to 6 p.m. House struck by L.—*Westbourne Grove* (I). T and L.—*Perivale* (I). In 1 hour 1·78 in. of R fell.—*Harrow Weald* (I). In 1 hour 30 min. 1·84 in. of R fell.—*Finchley, Etchingham Park* (I). Frequent T between 1 p.m. and 7 p.m.; L not very vivid. Very heavy R with H just after 2 p.m. for about 15 minutes. H stones larger than hazel nuts.—*Harefield Park* (I). Very heavy TS with H; more than an inch of R fell in less than half-an-hour, the total being 1·70 in.—*Trent Park* (I). Very heavy R and H, 1·09 in. falling in about 35 minutes.—*Pirbright Camp* (II). In 30 minutes ·93 in. of H and R fell.—*Weybridge, Field Place* (II). R began about 4.15 p.m.; lightly for a few minutes, then in real earnest, and a long, sloping lawn quickly became a sheet of water. This storm lasted till 4.50 p.m., when 1·65 in. of R was registered, none of which had fallen earlier in the day. T continued, some of the claps being immediately over head, and at 5.5 p.m. the R recommenced and lasted till 6.15 p.m., when another ·70 in. had fallen, making a total of 2·35 in. Another observer, at a distance of slightly over half-a-mile, registered 2·38 in.; and 2·32 in. fell at Esher. The previous heaviest fall in 24 hours was 1·98 in. on July 21st, 1889.—*Weybridge, West Oaks* (II). R 3·15 in., the bulk of which fell between 3.30 and 6.30 p.m.—*Weybridge, Heath Field* (II). In 1 hour 30 minutes 2·40 in. of R fell. —*Surbiton, Vronvelin* (II). In 1 hour 45 min. 1·96 in. of R fell.—*Surbiton* (II). The greater portion of the 2·12 in. of R fell during a TS, from 4.40 p.m. to 6 p.m.—*East Molesey* (II). In 2 hours 1·55 in. of R fell.—*Worcester Park* (II). In 60 minutes ·40 in. of R fell.—*Eltham, Cliefden* (II). T and ·80 in. of R.—*Swarraton Rectory* (II). In 50 minutes 1·42 in. of R and H fell.—*Maidenhead, Castle Hill House* (II). Veay heavy TS with ·98 in. of R in 30 minutes, and then very heavy H; some of the stones as large as marbles.—*Cookham Vicarage* (II). TS 5 p.m. to 6 p.m.—*King's Langley, Laurel Bank* (III). During a violent TS, L struck a tree opposite the house with a terrific report.—*Broxbourne* (III). T, L, H and R.—*St. Albans, The Grange* (III). TSS about mid-day and in evening, with ·68 in. of R. —*Kensworth* (III). Terrific TS, but little R and no H. A fine tree and the chimney of a cottage were struck by L.—*Hitchen, High*

Down (III). Severe H storm. Very destructive in the narrow line of its course from Harpenden over Luton, Offley, Pirton, Henlow and Langford.—*Slough, Upton Park* (III). Three TSS.: at 2.15 p.m., with ·20 in. of R; at 5.0 p.m., with ·73 in.; and at 6.50 p.m., with ·48 in. *Hedsor* (III). Severe TS and heavy R (·73 in.) from 5 to 7 p.m.; violent wind at times.—*Marlow Mills* (III). Great storm of wind; 1·40 in. of R and H fell in about 20 minutes.—*Odsey* [*Royston*] (III). TS.—*Luton, Pumping Station* (III). In 20 minutes 1·65 in. of R and H fell, causing much damage to crops and flooding streets and houses in the town.—*Shenfield* (IV). TS. Great wind from N. and violent H.—*Epping, The Hemnalls* (IV). Severe H storm, lasting from about 2.30 to 3 p.m. Some of the stones were as big as walnuts, making so much noise in falling that the T was not heard. Several panes of glass were broken, and great damage was done to crops.—*Writtle, Melbourne* (IV). In about 25 minutes 1·08 in. of R and H fell.—*Writtle, Little Boyton* (IV). In 30 minutes 1·34 in. of R and H fell.—*Chelmsford, High Street* (IV). Terrific H storm, 1·37 in. of R and H fell in 20 minutes.—*Chelmsford, Spergula* (IV). In 15 minutes 1·14 in. of R fell—*Danbury Rectory* (IV). In 26 minutes ·83 in. of R and H fell.—*Hatfield Peverel* (IV) In 20 minutes ·92 in. of H and R fell.—*Witham, Freebournes* (IV). Great tornado and H storm.—*Fingringhoe* (IV). Tremendous TS. In 15 to 20 minutes ·68 in. of R fell.—*Colchester, Surrey Villa* (IV). Storm from 3 to 4.30 p.m.; ·86 in. of R. Not much damage within 6 miles of Colchester.—*Colchester, Lexden* (IV). Very severe TS.—*Ipswich, Bishops Hill* (IV). An unusually awful TS in afternoon, but not much R or H.—*Little Saxham* (IV). TS. In about an hour ·93 in. of R fell.—*Wymondham* (IV). TS.—*Bishops Cannings* (V). TS at 5.30 p.m. A man was struck at Yatesbury, near Calne, and remained insensible for some days.—*Mildenhall* (V). T.—*Ashburton, Druid House* (V). T.—*Llandefaelog-fach* (XI). T.—*Galway, Queen's College* (XXII). L and T.

26th.—*Lewes, Bedford Lodge* (II). TS.—*Hastings, Guestling Rectory* (II). Violent TS with ·74 in. of R in 15 minutes.—*Bonchurch, The Lilies* (II). TS.—*Emsworth, Redlands* (II). Severe T and L; ·56 in. of R between 5.45 p.m. and 7.35 p.m.—*Oxford, Magdalen College* (III). Very heavy T and R at 4 p.m.—*Oxford, St. Giles* (III). Very heavy R, H, T and L for half-an-hour.—*Mere Down* (V). About 2 p.m. L was seen in the S., shortly followed by the storm, and in about an hour ·86 in. of R fell. At 2.10 p.m. L struck a tall ash in the rookery about 30 feet from the ground.—*Bishops Cannings* (V). T and heavy

R.—*Dorchester Waterworks* (V). In a little over an hour 1·10 in. of R fell.—*Blandford, Whatcombe* (V). Severe T and L and 1·16 in. of R. *Ashburton, Druid House* (V). Heavy R and T.—*Wincanton* (V). Heavy T and L.—*Long Ashton* (V). TS.—*Cheltenham, Southam Villa* (VI). Distant TS.—*Ross, The Graig* (VI). T and heavy R at 9 p.m.—*Llanfrechfa Grange* (XI). T and L.—*St. Martins, Les Blanches* (XI). Severe TS with 2·01 in. of R between 6 a.m. and 9.30 a.m.

26th—28th.—*Carisbrook, Rainsgrove* (II). T daily.

27th.—*Lewes, Saxonbury* (II). In 15 minutes ·50 in. of R fell.—*Rendlesham Hall* (IV). TSS.—*Hemingby* (VII). T and R in night.

28th.—*Emsworth, Redlands* (II). Distant T and L.—*Oxford, St. Giles'* (III). Distant L at night.—*Stamford, Duddington* (III). T and L.—*Stamford, Easton* (III). T and L.—*Alderbury* (V). T and torrents of R at 10 p.m.—*Bishops Cannings* (V). T and heavy R.—*Mildenhall* (V). T and L.—*Ashburton, Druid House* (V). L—*Further Barton* (VI). T at midnight and heavy R.—*Cheltenham, Southam Villa* (VI). TS in early morning.—*Ross, The Graig* (VI). Distant TS.—*Diglis Lock* (VI). Heavy TS.—*West Bromwich* (VI). In 1 hour 45 min. ·60 in. of R fell.—*Findern* (VII). TSS all night.—*Astle Hall* (VIII). TS in evening.—*Gateacre, The Nook* (VIII). R 2·61 in., of which ·68 in. fell in about 30 minutes.—*Bolton, The Park* (VIII). Distant T and L.—*Southport, Hesketh Park* (VIII). TS.—*Broughton-in-Furness* (VIII). Great TS.—*Grange-over-sands, Belmont* (VIII). Distant L and T at night.—*Seathwaite Vicarage* (VIII). TS.—*Meltham, Harewood Lodge* (IX). TS 11.0 to 11.40 p.m. Flashes of long duration, finely coloured and very brilliant.—*Huddersfield Cemetery* (IX). R 1·33 in., from 11 p.m. to early morning of 29th, with T and L.—*Leeds, Elmet Hall* (IX). TS.—*Goldsborough Hall* (IX). Very heavy TS.—*Knaresborough, Farnham* (IX). T and L.—*Baldersby* (IX). TS.—*Ulpha Vicarage* (X). Heavy TSS.—*Douglas, Victoria Road* (XI). TSS.—*Broadford, Hurdlestown* (XX). T.

29th.—*Baldersby* (IX). Between 3 and 5 p.m. ·74 in. of R fell.—*Mallow, Summer Hill* (XX). In less than 3 hours 30 min. 1·25 in. of R fell.

29th—July 18th.—*Syston* (VII). Absolute drought for 20 days.

29th—August 3rd.—*L'Ancresse* (XI). Partial drought for 36 days, with ·36 in. of R.

30th.*—*Alton, Ashdell* (II). TS.—*Tickhill* (IX). R 2·76 in., of

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* See also *Met. Mag.*, August 1897, p. 106.

which 2·60 in. fell between 6.20 p.m. and 7.40 p.m.—*Leeds, Elmet Hall* (IX). TS.—*Knaresborough, Farnham* (IX). T and L.—*Oughtershaw Hall* (IX). A tremendous storm of R, T and L occurred on the hill top between Arncliffe and Oughtershaw. The river two miles below Oughtershaw was in full flood, whilst at Oughtershaw itself no rise was visible.

30th—August 5th.—*Compton* [*Petersfield*] (II). Partial drought for 37 days, with ·37 in. of R.

JULY.

5th.—*Llanfrechfa Grange* (XI). S.W. gale.—*Douglas* (XI). S.W. gale.

6th.—*Hurdlestown* (XX). Severe H showers.

6th—20th.—*Chichester, Watergate* (II). Absolute drought for 15 days.

6th—21st.—*Knaresborough, Farnham* (IX). Drought.

7th.—*Hedsor* (III). Very cold night. Min. temp. 37°.—*Llandefaelog-fach* (XI). Slight frost on grass.

7th and 8th.—*Douglas* (XI). N.W. to S.W. gale.—*Ipswich, Bishops Hill* (IV). White frost reported by several gardeners in the district E. of Ipswich.

7th—August 3rd.—*St. Martin's, Les Blanches* (XI). Partial drought for 28 days, with ·24 in. of R.—*St. Peter, Port Beaulieu* (XI). Partial drought for 28 days, with ·18 in. of R.

8th.—*Rotherby Hall* (VII). Temp. on grass fell to 32°; the lowest on record in July.

16th.—Small whirlwind in Herefordshire.

18th.—*Royston, Therfield* (III). Absolute drought for 19 days ended. —*Astle Hall* (VIII). TS in evening.

19th.—*Westbourne Grove* (I). T and L.—*Capel, The Cottage* (II). TS.—*Abinger Hall* (II). Sharp TS in evening.—*Worcester Park* (II). T and ·85 in. of R.—*Birchington, Thor* (II). T and L in evening.—*Emsworth, Redlands* (II). T and L from 4 to 5 p.m.—*Cookham Vicarage* (II). L and T.—*Slough, Upton* (III). TS.—*Wellington, The Avenue* (V). TS.—*Bredon's Norton* (VI). TS.—*Dowlais, Gwernllwyn* (XI). L, T and R.

19th and 20th.—*Bishops Cunnings* (V). T.—*Dowlais, Gwernllwyn* (XI). L and T.

20th.*—*Westbourne Grove* (I). T.—*Oxford, Magdalen College* (III). Heavy TS. from 3 to 5.30 p.m.—*Oxford, St. Giles'* (III). TS from 3.45 to 5 p.m., 1·14 in. of R falling in 1 hour.—*Odsey* (III). TS.—*Sudbury, Friars Street* (IV). Very heavy TS.—*Little Saxham* (IV). TS. R 1·60 in., most of which fell between 6 and 7 p.m.—*Maiden Bradley* (V). T, L and 1·88 in. of R.—*Warminster, Rye Hill* (V). Heavy TS from 2.50 p.m. to 4.10 p.m., with 2·75 in. of R. The clouds appeared to keep gathering over this spot from all quarters during the storm, and the ground was completely flooded for half-a-mile N., E. and S. of the gauge, and about a mile to the W. of it in the direction of Maiden Bradley and Horningsham. The road passing here was a swift, running stream about a foot deep in the middle, on which hurdles, turnips and other things were floated a distance of fully three-quarters-of-a mile.—*Mildenhall* (V). T and L.—*Kingskerswell, Fluder* (V). R ·79 in., of which at least ·66 in. fell between 4.15 and 4.45 p.m.—*Bovey Tracey, Colehays* (V). Terrific H storm, the stones as big as large marbles; about 700 panes of glass broken in the vineries.—*Chudleigh, Torquay Waterworks* (V). R 3·02 in., of which 2·75 in. fell in 70 minutes; the flood caused much damage.—*Polapit Tamar* (V). In 45 minutes ·84 in. fell, and 1·29 in. in 2 hours 20 min.—*Long Ashton* (V). TS.—*Abbots Leigh* (V). TS; an inch of R falling in one hour.—*Clifton, Pembroke Road* (VI). TS 4 p.m.—*Further Barton* (VI). Three heavy TSS occurred. The first, at noon, lasted about an hour. The second began with T in the S.W. before 2.30 p.m. At 3 p.m. two trees were struck by L about half-a-mile from Further Barton. The third came up also from the S.W. and R and H began at 5 p.m. Two violent claps of T, synchronous with L, occurred at 5.15 and 5.30 p.m., when a Scotch fir had a strip of bark peeled off from top to bottom. The H stones caused great damage to fruit and vegetables; they were chiefly round, some with sharp points, but not pyramidal. Bar. steady; no wind.—*Stroud, Stanley Park* (VI). Tremendous fall of R, commencing at 4.30 p.m.; by 5.30 p.m. two inches had fallen. Total fall, 2·73 in. The town was partially flooded, and roads and paths were much washed.—*Stroud, Upfield* (VI). In 1 hour 1·62 in. of R fell.—*Cheltenham, Southam Villa* (VI). T and L.—*Howick Hall* (X). R 2·37 in.; the greatest fall on record for 24 hours.—*Pawston* [*Coldstream*] (X). R 2·13 in.; the heaviest fall since September, 1880. The gauge was erected in 1872, and on

* See also *Met. Mag.*, August 1897, p. 103.

only two other days has the fall exceed 2·00 in. —*Dowlais, Gwernllwyn* (XI). Very severe TS. A man killed by L at Rhymney.—*Cork, Wellesley Terrace* (XX). T and L in evening.—*Hurdlestown* (XX). L at 8.30 p.m.

21st.*—*Finsbury Park* (I). In 2 hours 30 min. 2·10 in. of R fell, and in less than 4 hours 2·53 in.—*Crouch End, Aubrey Road* (I). Between 2 p.m. and 5 p.m. 2·00 in. of R fell.—*Crouch End, Fairfield Road* (I). In 2 hours 1·90 in. of R fell.—*Muswell Hill* (I). Heavy TS at 1.45 p.m., lasting about 2 hours. Some of the L and T was almost simultaneous. Some H, but not large.—*Abinger Hall* (II). Sharp TS in forenoon.—*Frindsbury, Manor Farm* (II). Severe TS.—*Rochester, Cooling* (II). Very severe TS.—*Crossness* (II). Heavy TS at 2 p.m.—*Ryde, Thornbrough* (II). T.—*Farringdon, The Elms* (II). In 55 minutes 1·20 in. of R fell.—*Duddington* (III). Distant TS at 4.30 p.m.—*Stamford, Easton* (III). T and L.—*Ispwich, Bishop's Hill* (IV). Between 4.15 and 5.15 p.m. 2·95 in. of R fell during a terrible TS. Two boys and a horse were killed by L, trees were struck and other damage was done within a mile of Bishop's Hill.—*Ipswich, Belstead Hall* (IV). In less than an hour 1·76 in. of R fell.—*Fairford, Kempsford* (VI). Remarkable H storm lasting half-an-hour; the H stones were nearly as big as walnuts.—*Bredons Norton* (VI). TS.—*Bodenham Vicarage* (VI). In 2 hours 30 min. 1·61 in. of R fell.

22nd.—*Drumnadrochit* (XVIII). Between 4.40 and 5.30 p.m. ·57 in. of R fell.

24th.—*Bodenham Vicarage* (VI). In two-and-a-half hours 1·60 in. of R fell.—*Abergwesyn Vicarage* (XI). Distant T.—*Moniaive, Maxwelton House* (XII). TS of long duration.—*Drummore* (XIII). TS.—*Stronvar* (XVI). T and L from 7.15 to 8.15 p.m.—*Coupar Angus Station* (XVI). Severe TS; house struck and the chimney top demolished.—*Galway, Queen's Coll.* (XXII). L, T and heavy R.

25th.—*Oxford, St. Giles'* (III). T and L at mid-day.—*Rendlesham Hall* (IV). TS.—*Bolton, The Park* (VIII). T and L from 10 to 11 a.m.—*Southport, Hesketh Park* (VIII). TSS. A chimney stack struck by L at Birkdale.—*Meltham, Harewood Lodge* (IX). Sharp TS from 11.25 to 11.40 a.m.—*Knaresborough, Farnham* (IX). T and L, and H the size of marbles at 2.30 p.m.—*Thixendale* (IX). TS, H and R very heavy.—*Baldersby* (IX). TS at 3 p.m.—*Llanfrechfa Grange* (XI). S.W. gale.—*Treherbert, Tyn-y-waun* (XI). T, L and heavy R.—*Forres, H.R.S.* (XVII). T and L.—*Watten, H.R.S.* (XIX). TS.

* See also account of a tree damaged by L, in *Met. Mag.*, 1897, p. 141.

26th.—*Emsworth, Redlands* (II). Distant T from 2.30 to 7 p.m.—*Maidenhead, Castle Hill House* (II). TS with heavy R.—*Southgate, The Lawns* (III). A TS commenced about 4.55 p.m. and lasted till 6.20 p.m., 2·50 in. of R falling in less than 1 hour 30 min. An oak about 3 feet in circumference, and 40 yards from the house, was struck by L and split from top to bottom, the bark being peeled completely off.—*St. Albans, The Grange* (III). TS and H. Tower of Christchurch, St. Albans, struck and damaged by L in bright sunshine about 5.30 p.m.—*Oxford, Magdalen College* (III). Heavy TS at 2.40 p.m.—*Oxford, St. Giles'* (III). TS at 2.15 p.m.—*Shenfield* (IV). TS and ·66 in. of R.—*Rendlesham Hall* (IV). T, L and heavy R at 6 p.m.—*Swaffham* (IV). TS.—*Cheltenham, Southam Villa* (VI). T and L.—*Little Ponton Rectory* (VII). The heaviest R remembered, 1·75 in. falling in about 1 hour 30 min. from 4.45 p.m. T on all sides.—*Astle Hall* (VIII). TS in morning.—*Tuam, Gardenfield* (XXII). Violent TS and heavy R.

26th and 27th.—*Capel, The Cottage* (II). TSS.

27th.—*Rendlesham Hall* (IV). T.—*Lowestoft, Corton* (IV). TS at 10 a.m. and again at 6 p.m.; R ·37 in. and ·45 in. respectively.

28th.—*Glenlee* (XII). T.

31st.—*Kilkenny, Sion Villa* (XXI). Thick, wet fog early.

AUGUST.

During this month there was an unusual amount of damage by TSS. A selection for dates Aug. 2nd to 19th occupies parts of pages 124–127 of the *Met. Mag.* for 1897. The following notes continue the list to August 31st. It is, of course, far from complete, but tends to show how frequent and widespread was the mischief :—

AUGUST 22ND.

Lincoln.—Kirton-in-Lindsey.—A house was struck by L about 10.30 a.m., damaging the chimney and roof, and breaking a wall-glass and mantlepiece ornaments.

AUGUST 24TH.

Suffolk.—A barn at Rose Green Farm, Hadleigh, was fired by L. The chimney of a cottage at Lenton was struck by L.

Leicester.—A greenhouse at Sanham House, Melton, was struck and damaged.

Rutland.—Heavy R and H fell at Uppingham, and many houses were flooded.

Lincoln.—A horse was killed at Heighington; an ash tree fired at Nettleham, and a cow at Saxilby Road was struck.

AUGUST 25TH.

Middlesex.—Hammersmith Broadway Station was flooded, also the basements of two shops in Chiswick High Road, and the Chiswick Police Station. At Acton many windows and greenhouses were broken by the H, which covered the ground. A house in Madeley Road, Ealing, was struck by L, and at Osterley Park one of the fine old elms was struck. At Bentley Priory, Great Stanmore, a deer was killed and a large oak shattered. Mr. G. Butt, of Belmont, had two sheep killed.

Surrey.—The L struck a shed at Messrs. Whitmore's tannery, Bermondsey, and some bricklayers, working near, fell to the ground and were injured. At Richmond many panes of glass were broken by the H, and cellars were flooded.

Kent.—A tree was struck in Swift's Park, Cranbrook; the telephone wire was cut between Sissinghurst and Biddenden; a cow was killed at Staplehurst. At Benenden two sheep were killed, and a tree was struck, and at Goddard's Green a poplar was splintered.

Suffolk.—At Sproughton a willow was struck. At Place Farm, Haverhill, large H stones and lumps of ice fell.

Glamorgan.—A severe storm occurred in the neighbourhood of Blaina; volumes of water poured from the mountains, and a landslip occurred on the railway between Abertillery and Blaina.

AUGUST 28TH.

Perthshire.—Heavy TS at Crieff and in the surrounding district.

AUGUST 30TH.

Devonshire.—Very heavy R at Exeter, causing floods in St. Thomas's.

AUGUST 31ST.

Essex.—At Sherrard Road, Manor Park, a timber stack was fired by L. The river Roding overflowed flooding the rifle ranges.

Yorkshire.—A herring house at Filey was struck by L, and the signalling lamp outside the coastguard station was struck, and a coastguard standing by it was stunned.

3rd.—*Maidstone, Debtling* (II). In 36 days, ending August 3rd, only ·25 in. of R fell.

4th.*—*Duddington* (III). In 41 days, ending on this date, ·23 in. of R fell.—*Grange, Belmont* (VIII). Distant L.—*Duddon Valley, Ulpha* (X). TS.—*New Galloway, Glenlee* (XII). T and L.—*Maxwelton House* (XII). TS in evening.—*Glasgow, Queen's Park* (XIV). Great TS.—*Colmonell* (XIV). T and L.—*Stronvar* (XVI). T and L., 7.30 to 9.45 p.m.

4th and 5th.—*Brampton, Denton House* (X). Very high night temp., min. 64°.—*Lilliesleaf, Riddell* (XII). TSS.—*Drummore* (XIII). TSS.

* See also *Met. Mag.*, September, 1897, p. 123; and October, 1897, p. 139.

5th.—*Lewes, Bedford Lodge* (II). TS.—*Otterbourne, W.W. Shawford* (II). During a TS 1·21 in. of R fell in 1 hour.—*Maidenhead, Castle Hill House* (II). Severe TS, with rather heavy rain.—*Hedsor* (III). TSS and H at intervals.—*Winslow, Botolph Claydon* (III). Violent TS., ·82 in. of R fell in 1 hour 15 min.—*Odsey* [*Royston*] (III). TS and H.—*Sudbury, Friars Street* (IV.) Severe TS, in about 40 minutes ·79 in. of R fell.—*Rendlesham Hall* (IV). T and L.—*Lowestoft, Corton* (IV). TS at 7 p.m.—*Swaffham* (IV). TS.—*Bishop's Cannings* (V). T.—*West Bromwich* (VI). In 1 hour ·86 in. of R fell.—*Cheadle, The Heath House* (VI). TS.—*Findern* (VII). TSS.—*Bolton, The Park* (VIII). T and L.—*Rochdale, Deeplish Hill* (VIII). R 2·15 in., of which 1·60 in. fell in 40 minutes.—*Rochdale, Park Observatory* (VIII). Two TSS. The first from noon to 1.15 p.m., with 1·93 in. of R; the second from 5.25 to 6.15 p.m., with 1·31 in., making a total of 3·24 in. Both storms commenced and finished abruptly.—*Rochdale, Fieldhead* (VIII). In 45 minutes, from 0.15 p.m., 1·54 in. of R fell, and in 30 minutes, from 5.30 p.m., ·56 in. —*Southport, Hesketh Park* (VIII). TS. A chimney stack and two trees were struck by L at Birkdale, and three cows were killed and a pony was injured on Birkdale Common.—*Grange, Belmont* (VIII). Five TSS.—*Hawkshead, Esthwaite Lodge* (VIII). TS following three hot days.—*Seathwaite Vicarage* (VIII). T and L. T on and off all day. —*Meltham, Harewood Lodge* (IX). TS.—*Knaresborough, Farnham* (IX). T and L.—*Settle, The Terrace* (IX). R 2·10 in., the first fall exceeding 2·00 in 12 years.—*Austwick, Crow Nest* (IX). Distant T at 11 a.m., and a severe storm from 11.15 a.m. to noon, ·39 in. of R falling in the 45 minutes. Severe L, T and R again from 5.45 p.m. to 6.30 p.m., with ·78 in. of R.—*Penrith, Greystoke* (X). Severe TS, and ·88 in. of R between 0.20 p.m., and 0.50 p.m.—*Grasmere, Pavement End* (X). From 10.40 a.m. to noon 1·16 in. of R fell, and from noon to 9 p.m., ·82 in.; total, 1·99 in. in 24 hours.—*Brampton, Denton House* (X). Severe TS, with ·73 in. of R.—*Maxwelton House* (XII). TS.—*Stronvar* (XVI). T and L from 8.25 to 10 p.m.—*Forres H.R.S.* (XVII). TSS.—*Watten H.R.S.* (XIX). TS.—*Tuam, Gardenfield* (XXII). T.

5th and 6th.—*Stamford, Easton* (III). T and L.—*Cheltenham, Southam Villa* (VI). T and L.—*Astle Hall* (VIII). TS and heavy R.—*Goldsbro'* (IX). T.—*Ballinluig* (XVI). TSS.

6th.—*Tavistock, Rose Villa* (V). TS at midday.—*Otterford, Otterhead* (V). In 17 minutes ·46 in. of R fell.—*Wellington, The Avenue*

(V). TS and heavy R.—*Churchill* (V). TS with 1·41 in. of R.—*Worcester, Diglis Lock* (VI). Heavy TSS.—*Bolton, The Park* (VIII.) T and L most of the day.—*Llanfrechfa Grange* (XI). T and L 1.30 p.m.—*Stronvar* (XVI). T and L at intervals from 11 a.m. to 6 p.m. —*Watten H.R.S.* (XIX). T. *Antrim, The Manse* (XXIII). T.

6th and 7th.—*Otterford, Otterhead* (V). T.—*Invershin* (XIX). T.

7th.—*Redditch, Prospect Hill* (VI). TS and 1·09 in. of R in 35 minutes, between 3.5 and 3.40 p.m.

7th and 8th.—*West Bromwich* (VI). In 7 hours 2·08 in. of R fell. —*Coventry, Priory Row* (VI). In 10 hours 1·42 in. of R fell.

7th—9th.—*Hawkshead, Esthwaite Lodge* (VIII). Max. temp. 81°·0, 82°·9, and 81°·2 respectively; remarkable, inasmuch as on the average, 80° is not recorded more than once a year.

8th.—*Capel, The Cottage* (II). TS.—*Liss, Lingwood* (II). T and H storm.—*Fawsley* (III). Between 7.30 a.m. and 5.30 p.m. 2·75 in. of R fell; and between 9 a.m. and 1.30 p.m. 2 25 in.—*Rendlesham Hall* (IV). Heavy R with T from 2 p.m. to 4.30 p.m.—*Great Glenham* (IV). An almost tropical storm of short duration, R 1·15 in. *Bishop's Cannings* (V). T and heavy R in early morning.—*Ludlow, Ashford* (VI). Between 10.30 a.m. and 1.30 p.m. ·66 in. of R fell.—*West Bromwich* (VI). Between 7 a.m. and 2 p.m. 2·07 in. of R fell, believed to be the heaviest fall for many years. 1·20 in. fell between 10 a.m. and 0.30 p.m.—*Walsall Sewage Farm* (VI). TS with 2·39 in. of R; about half falling in less than an hour.

10th.—*Ashburton, Druid House* (V). L at 10 p.m.—*Tavistock, Rose Villa* (V). TS between 9.30 and 10.30 p m.—*Ross, The Graig* (VI). L at night.—*Oakley Quarries* (XI). Great TS, and 2·40 in. of R.

10th and 11th.—*Lilliesleaf, Riddell* (XII). TSS.

11th—*Northampton, Sedgebrook* (III). TS.—*Odsey* [*Royston*] (III). TS.—*Astle Hall* (VIII). TS at night.—*Grange, Belmont* (VIII). L and T at 3.30 a.m.—*Drummore* (XIII). TS.—*Glasgow, Queen's Park* (XIV). T and very heavy R.—*Banton by Bonnybridge, Craigdouffie* (XV). Two whirlwinds occurred, damaging ricks and scattering the hay, the first about 0.30 p.m., and the second 1.40 p.m.

12th.—*Ross, The Graig* (VI). Coloured lunar halo.

14th.—*Birchington, Thor* (II). T and L at 4.30 p.m.—*New Galloway, Glenlee* (XII). T.—*Colmonell* (XIV). T and L.

16th and 17th.—*Douglas, Victoria Road* (XI). Severe S.W. gale.

17th.—Excessive flooding of the burns at the head of Moffat Water and of St. Mary's Loch. Apparently the fall was heaviest

near Whitecombe Edge (2695 ft.), at the S. of Peebles and N. of Dumfriesshire. The main road from Selkirk to Moffat was blocked in several places for lengths of more than 100 yards; at Warmy Sike it is reported to have been covered for 130 yards, in places 6 ft. deep.

17th—20th.—*Carisbrooke, Rainsgrove* (II). T daily.

18th.—*Lewes, Saxonbury* (II). Several bullocks killed by L at night.—*Emsworth, Redlands* (II). Distant T and L at 11 p.m.—*St. Albans, The Grange* (III). TS in afternoon.—*Hedsor* (III). T and heavy R.—*Odsey* [*Royston*] (III). TSS.—*Rendlesham Hall* (IV). T and R storm in afternoon.—*Ashburton, Druid House* (V). L in evening.—*Tavistock, Rose Villa* (V). L.—*Stroud, Upfield* (VI). In 1 hour ·50 in. of R fell.—*Cheltenham, Southam Villa* (VI). T and L.—*Findern* (VII). TS.—*Knaresborough, Farnham* (IX). L.—*Mullingar, Belvedere* (XXI.) H.

19th.—*Capel, The Cottage* (II). TS.—*Wallington* (II). T and L.—*Birchington, Thor* (II). T and L in afternoon.—*Broxbourne* (III). T, L, H and R.—*Colchester, Lexden* (IV). Distant TS.—*Astle Hall* (VIII). TS in afternoon.

20th.—*Wootton Bassett* (V). R 2·40 in.; the largest fall in 24 hours in the 16 years recorded.—*Harptree Court* (V). Between 2.45 and 3.45 p.m. 1·08 in. of R fell.

21st.—*Findern* (VII). TS.—*Macclesfield, The Park* (VIII). TS.—*Thixendale* (IX). TS.

23rd.—*Knaresborough, Farnham* (IX). T and L.

23rd and 24th.—*Odsey* [*Royston*] (III). T.

24th.—*Emsworth, Redlands* (II). Strong squalls with L, H and R. *Colchester, Lexden* (IV). Distant TS.—*Campden, Hidcote* (VI). T.—*Horncastle, Hemingby* (VII). T.—*Goldsborough Hall* (IX). T.—*Llandefaelog-fach* (XI). T.—*Penmynydd Vicarage* (XI). Between 2.40 and 4.40 p.m. 1·46 in. of R fell.

24th and 25th.—*Capel, The Cottage* (II). TSS.—*Northampton, Sedgebrook* (III). T.

25th.—*Acton, Newburgh Road* (I). Severe H storm lasting half-an-hour, with T and L at 11.45 a.m. The stones measured from 2 to 2¾ inches round, and caused great damage to vegetation and glass; 1·11 in. of R and H fell in less than an hour, and caused flooding in houses and shops. Heaps of H stones lay for hours, and presented a very winterly appearance.—*Finchley, Etchingham Park* (I). Some L and T between 3 and 5 p.m.—*Maidstone, Bearsted* (II). In 20 minutes

·31 in. of R fell during a short but severe storm, in which two trees and a hop-oast were struck by L and one man was rendered unconscious.—*Lewes, Bedford Lodge* (II). TS.—*Hastings, Hollington* (II). Heavy R began at 11.30 a.m., with much T and L, and continued till 0.30 p.m. During the hour 1·02 in. of R fell. At 0.30 p.m. the L increased in intensity, and H began to fall and continued till 1 p.m., during which half hour ·80 in. fell. Light showers then occurred till 1.30 p.m., making a total of 1·89 in. in 2 hours. The H was of great size, the stones varying from $\frac{3}{8}$ in. in diameter to more than $\frac{3}{4}$ in. At 6 p.m. it was lying in places 6 inches deep, and at one time must have covered the country nearly one inch deep. *Rendlesham Hall* (IV). T.—*West Bromwich* (VI). In 25 minutes ·18 in. of R fell.—*Knaresborough, Farnham* (IX). TS.

26th.—*Portsmouth, Fort Cumberland* (II). R ·94 in.; at least two-thirds of which, it is estimated, fell between 6 and 6.45 p.m.—*Emsworth, Redlands* (II). R ·98 in.; practically all falling between 4.30 and 6.30 p.m.—*Abergwesyn Vicarage* (XI). In 15 minutes ·51 in. of R fell, with distant T.

27th.—*Harlow, Sheering* (IV). T, H and R.

28th.—*Westbourne Grove* (I). T and L.—*Stamford, Easton* (III). TS.

28th.—For the details of a very sad and fatal accident by L on this day, see *Quar. Jour. R.Met.Soc.*, Vol. XXIII., p. 306.

29th and 30th.—*Douglas, Victoria Road* (XI). Severe S.S.E. gale.

29th—31st.—*Llandovery* (XI). T daily.

29th—September 6th.—*Burton-on-Stather Vicarage* (VII). In the 9 days 3·70 in. of R fell.

30th.—*Addington* (III). In 10 minutes ·20 in. of R fell.—*Maxey Vicarage* (III). T.—*Stamford, Easton* (III). L.—*Rendlesham Hall* (IV). S.W. gale.—*Long Ashton Estate Office* (V). Very heavy R fell between 6 p.m. and 9 a.m. on 31st, 3·59 in. falling in 24 hours; this exceeds by ·70 in. any fall registered during 25 years.—*Bristol Dock* (VI). In 14 hours, ending 8 a.m. on 31st, 3·09 in. of R fell; between 3 and 4 a.m. ·44 in. fell, and between 6 and 7 a.m. ·61 in.—*Clifton, Royal York Crescent* (VI). R 3·12 in. in about 12 hours.—*Clifton, Pembroke* (VI). In about 17 hours 1·90 in. of R fell.—*Bristol, Fishponds* (VI). Great R, 2·19 in. L in N.W., but no T.—*Llanfrechfa Grange* (XI). T and L at midnight.

30th and 31st.—*Dowlais, Gwernllwyn* (XI). L and T.

31st.—*Westbourne Grove* (I). T and L.—*Finchley, Etchingham Fark* (I). Several peals of T.—*Wallington* (II). T and L.—*Crossness* (II).

Heavy TS from 4 p.m. to 5.40 p.m., with terrific L and heavy downpour part of the time, with high wind, H, &c. Storm moved S. by E. and came on again at 6 p.m. from E., and was over again about 7 p.m.; R ·73 in., most of which fell between 5 and 5.40 p.m.—*Emsworth, Redlands* (II). Vivid L and distant T at 7 p.m.—*Chelmsford, Broomfield Hall* (IV). TSS at 11.30 a.m., with ·15 in. of R; at 2.30 p.m. with ·36 in., and at 4 p m. with ·52 in. of R and H. The storms came from W. or S.W.—*Colchester, Lexden* (IV). TSS.—*Rendlesham Hall* (IV). T and L.—*Campden, Hidcote* (VI). T on and off all day.—*Cheltenham, Southam Villa* (VI). T and L.—*Normanton-on-the-Wolds* (VII). TS and ·28 in. of R in 26 minutes.—*Bolton, The Park* (VIII). T and L.

SEPTEMBER.

1st.—*Tavistock, Rose Villa* (V). L.—*Wellington, The Avenue* (V). Violent gale from S.—*Templeudigan, Ballindoney* (XXI). R fell in torrents, commencing about 11 a.m., and by 2.30 p.m. 1·37 in. had fallen. The R ceased about 4.30 p.m., when ·36 in. more had fallen, bringing the total up to 1·73 in. from 11 a.m.

2nd.—*Finchley, Etchingham Park* (I). L and T between 5.30 and 6.20 p.m.—*Odsey* [*Royston*] (III). TSS.—*Colchester, Lexden* (IV). TSS.

3rd.—*Wellington, The Avenue* (V). L.—*Dowlais, Gwernllwyn* (XI). L.

4th.—*Wellington, The Avenue* (V). TS.—*Southport, Hesketh Park* (VIII). Fresh gale from N.W.—*Upper Midhope* (IX). In 2 hours 30 min. ·60 in. of R fell.—*Abergwesyn Vicarage* (XI). Very stormy at night, with much R.—*Buchlyvie, The Manse* (XV). S on the hills; three weeks earlier than in any year since 1879.

4th.—Waterspout off *Cromer*.

5th.—Considerable floods at *Aberystwith, Tregaron, Lampeter, Towyn, Dolgelly* and *Corwen*.

7th.—*West Bromwich* (VI). In 20 minutes ·18 in. of R fell.

17th.—*Astle Hall* (VIII). TS in evening.

17th and 18th.—*Old Lodge* [*Salisbury*] (II). TSS.

18th.—*Tavistock, Rose Villa* (V). L.—*Wellington, The Avenue* (V). TS.

23rd.—*Douglas, Victoria Road* (XI). Southerly gale and high sea; steamer delayed.

28th.—*Westbourne Grove* (I). T and L.—*Lewes, Bedford Lodge* (II). TS.

29th.—*Kensington, Edith Road* (I). Heavy TS about 7.30 to

8.45 p.m.; R ·93 in.—*Muswell Hill* (I). L, T and heavy R between 7.30 and 10 p.m.—*Finchley, Etchingham Park* (I). Heavy R from 7.40 to 10 p.m., and much L, but little T.—*Chiddingfold* (II). Severe TS.—*Capel, The Cottage* (II). TS.—*Abinger Hall* (II). TS lasting about 1 hour 30 min. L very vivid; some flashes appeared to be composed of several, and to last longer than usual. *Oxshott* (II). TS. —*Wallington* (II). Severe TS, with H and heavy R.—*Worcester Park* (II). About the worst T of the year at 7 p.m.; R ·83 in.—*Birchington Thor* (II). Sharp TS at midnight.—*Leysdown* (II). Distant TS.—*Crossness* (II). Very heavy TS at 8 p.m. Much L and ·66 in. of R.—*Lewes, Saxonbury* (II). TS in evening.—*Emsworth, Redlands* (II). T and L at 7 p.m.—*Old Lodge* [*Salisbury*] (II). TS with H and 1·03 in. of R.— *Newbury, Weston* (II). R 1·56 in. The heaviest in one day since November, 1894.—*Maidenhead, Castle Hill House* (II). TS.—*Broxbourne* (III). TS.—*St. Albans, The Grange* (III). TS from 8 to 10 p.m., with ·55 in. of R.—*Slough, Upton* (III). TS.—*Hedsor* (III). TS and heavy R.—*Newport Pagnell* (III). R 1·89 in., lasting only about 45 minutes, —*Dorchester* (III). T with 1·67 in. of R.—*Culham Vicarage* (III). R 1·80 in., the greater part falling between 5.45 and 6.45 p.m.—*Nuneham Park* (III). Heavy TS and 1·55 in. of R.—*Oxford, Magdalen College* (III). Very vivid L, T and heavy R (1·21 in.).—*Oxford, St. Giles'* (III). Sharp TS between 5 and 7 p.m. —*Blisworth, Grafton House* (III). R 1·05 in.; the heaviest fall since September 4th, 1896. —*Duddington* (III). TS with very heavy R for half-an-hour at 7 p.m. —*Stamford, Easton* (III). T and L.—*St. Neots, Great Paxton* (III). Heavy TS with 1·98 in. of R; about 5.30 p.m. the L entered a house through the thatched roof and killed a little girl.—*Odsey* [*Royston*] (III). TS; R 1·13 in.—*Stretham* (III). Violent TS and 1·40 in. of R. —*Stretham Ferry* (III). Heavy TS and 1·90 in. of R in 1 hour 30 min.—*Shenfield* (IV). TS and ·94 in. of R.—*Witham, Freebournes* (IV). TS and 1·09 in. of R.—*Colchester, Surrey Villa* (IV). In 1 hour ·30 in. of R fell.—*Colchester, Lexden* (IV). TS at 10 p.m. Much distant L earlier.—*Sudbury, Friars Street* (IV). L in evening.—*Rendlesham Hall* (IV). L, T and heavy R.—*Wymondham* (IV). TS.—*Denver* (IV). R 2·55 in., the heaviest fall in 13 years; most of it fell between 8 p.m. and 9.30 p.m.—*Emneth* (IV). Severe TS, with 1·42 in. of R.— *Swaffham* (IV). TS.—*Hillington School* (IV). Tremendous R, with T and L; in 4 hours 2·12 in. fell.—*Dersingham Vicarage* (IV). Abnormal R; 2·18 in. fell.—*Alderbury* (V). TS.—*Bishops Cannings* (V). L in evening.—*Wellington, The Avenue* (V). L at night.—*Wincanton* (V).

T and L.—*Cheltenham* (VI). L.—*Ross, The Graig* (VI). No T or L, but an inch of R in 12 hours.—*Bucknall* (VII). T and L.—*Llanfrechfa Grange* (XI). Very heavy R with L from 4 to 6 p.m.—*Oystermouth, Newton* (XI). Violent TS.—*St. Martin's, Les Blanches* (XI). A heavy TS between 5.15 and 6 p.m. During this time T and L were incessant, and ·54 in. of R fell.

30th.—*Clapham Park* (II). TS and ·98 in. of R.

OCTOBER.

3rd—November 24th.—*Colchester, Lexden* (IV). Partial drought for 53 days, with ·52 in. of R.

5th.—*Danbury Rectory* (IV). Partial drought for 33 days from this date, with ·29 in. of R.

11th.—*Drumnadrochit* (XVIII). S down to the 1,000 ft. line.

12th.—*Drumnadrochit* (XVIII). S on the ground.

13th—16th.—*Killarney* (XX). R 4·00 in., causing floods on the Flesk.

14th and 15th.—*Dalnaspidal* (XVI). S.

15th.—*Grange-over-sands, Belmont* (VIII). L and T 9.15 to 9.40 a.m.—*Coupar Angus* (XVI). R ·98 in., and a slight flood.—*Cork, Wellesley Terrace* (XX). T and L in evening.

15th—November 7th.—*York, Burton Croft* (IX). No R fell, but there was occasional deposit from fog.

16th and 17th.—*Douglas, Victoria Road* (XI). Whole gale from S.S.W.

16th—November 11th.—*Caerwnon* [*Builth*] (XI). Partial drought for 27 days, with ·17 in. of R.

16th—November 12th.—*Brampton, Denton House* (X). In the 27 days only ·16 in. of R fell.

17th.—*Cork, Wellesley Terrace* (XX). S.W. gale.—*Tuam, Gardenfield* (XXII). T and L.

17th.—Excessive R in evening in and round *Londonderry*; much damage by flooding in the town and neighbourhood.

17th—November 6th.—*Edenhall Vicarage* (X). Absolute drought for 20 days.

18th—31st.—*Melmerby Rectory* (X). Absolute drought for 14 days.

18th—November 6th.—*Gateacre, The Nook* (VIII). Absolute drought for 20 days.—*Bolton, The Park* (VIII). Absolute drought for 20 days.

18th—November 11th.—*Hoylake* (VIII). Absolute drought.—*Llanefydd, Plas Uchaf Reservoir* (XI). Absolute drought for 25 days at the usually wettest part of the year.

19th—November 6th.—*Bridgwater Nurseries* (V). Absolute drought for 19 days.—*Armathwaite Hall* (X). Absolute drought for 19 days.

19th—November 7th.—*Ludlow, The Sheet* (VI). Absolute drought for 19 days.

20th—November 6th.—*St. Martin's, Les Blanches* (XI). Absolute drought for 18 days.

25th—31st.—*St. Albans, The Grange* (III). Much fog.

26th—28th.—*Douglas, Victoria Road* (XI). Fog early.

27th—30th.—*Blandford, Whatcombe* (V). Thick fog.—*Baldersby* (IX). Dense fogs.

27th—31st.—*Rendlesham Hall* (IV). Fog early.

28th.—*Colchester, Surrey Villa* (IV). Very thick fog.

30th and 31st.—*Northampton, Sedgebrook* (III). Fog.

NOVEMBER.

6th.—*Bolton, The Park* (VIII). Absolute drought for 20 days ended.—*L'Ancresse* (XI). Absolute drought for 20 days ended.—*St. Peter Port, Beaulieu* (XI). Absolute drought for 18 days ended.

10th.—*Ealing, Gordon Road* (I). A ripe strawberry gathered in the open.

11th.—*Swansea, St. James's Gardens* (XI). R ·09 in., the first registered since October 18th. The longest drought remembered for many years.

12th.*—*Cartmel, Broughton Hall* (VIII). R 2·90 in.; excessive even here.—*Colton* (VIII). R 3·82 in., remarkably heavy.—*Cartmel Fell Vicarage* (VIII). An unprecedented fall of 3·91 in. of R in 24 hours.—*Seathwaite Vicarage* (VIII). R 4·07 in. The greatest fall recorded in 9 years.—*Cockermouth, Higham* (X). R 2·45 in.; since 1865, exceeded only on Aug. 26th, 1895, when 2·47 in. fell.—*Cockermouth, Broughton Grange* (X). R 2·53 in., the heaviest fall yet recorded.—*Cockermouth, Ullock* (X). R 4·44 in. The rainstorm commenced at about 5 a.m., and at 7.30 a.m. ·31 in. was measured, so that in 26½ hours 4·75 in. fell.—*Kendal, Ellergreen* (X). R 3·35 in., the greatest fall for many years.—*Ambleside, Skelwith Bridge* (X). R began about 6 a.m. on 12th,

* See also *Met. Mag.*, December, 1897, p. 165.

and ceased about 8 a.m. on 13th, and during the 26 hours 6·81 in. fell.—*Grasmere, Pavement End* (X). From 9 a.m. to 9 p.m. 2·37 in. of R fell, and from 9 p.m. to 9 a.m. on 13th, 2·01 in.; making a total of 4·38 in. for 24 hours.—*Shap Hillfield* (X). One of the wettest days ever seen, R 2·66 in.

12th—14th.—*Maryport, Netherhall* (X). R 3·91 in., causing the highest flood remembered on the river Ellen.

13th—18th.—*Ffestiniog, New Welsh Quarry* (XI). R 10·85 in., 4·05 in. falling on 14th and 4·16 in. on 18th.

14th.—*Drumnadrochit* (XVIII). S.—*Invershin* (XIX). S.—*Watten H.R.S.* (XIX). Storm of wind. R, sleet, and S from N.

19th.—*Upminster Hall* (IV). The thickest fog remembered.

21st—24th.—*St. Albans, The Grange* (III). Much fog.

22nd and 23rd.—*Coventry, Priory Row* (VI). Dense fog.

23rd.—*Astle Hall* (VIII). Thick fog all day.

25th.—*Itchen Stoke* (II). Fog and mist all day, but at 3.20 p.m. a thick yellow fog came over from E., making it as dark as it should have been two hours later; the darkness lasted about half an hour.

27th.—*Colmonell* (XIV). L.

27th—30th.—*Dalnaspidal* (XVI). S. daily.

28th.*—*Maidenhead, Castle Hill House* (II). Heavy gale.—*Oxford St. Giles'* (III). Sharp R storm at 4 p.m. with a little H.—*Northampton, Sedgebrook* (III). Heavy squalls and R.—*Duddington* (III). Heavy gale and squalls.—*Sudbury, Friars Street* (IV). Gale, and L at night.—*Bishops Cannings* (V). N.N.W. gale.—*Tavistock, Rose Villa* (V). W.N.W. gale, with T and L.—*Further Barton* (VI). Gale from W.—*Ross, The Graig* (VI). Violent gale of short duration.—*Coventry, Priory Row* (VI). Heavy gale at night.—*Findern* (VII). Very stormy with TS.—*Astle Hall* (VIII). Great gale from N.W. Heavy R, H and S storms. TS at 7 p.m.—*Southport, Hesketh Park* (VIII). Whole gale at night. L, T and H.—*Grange, Belmont* (VIII). L and T 5 to 7 p.m.—*Seathwaite Vicarage* (VIII). Cold wind; upper fells white.—*Meltham, Harewood Lodge* (IX). Gale all day, severe at night. First S.—*Goldsborough Hall* (IX). Westerly gale with heavy showers of R and H.—*Thixendale* (IX). L.—*Middlesborough, Ormesby* (IX). Heavy N.W. gale, with S, H, R, T and L.—*Ulpha School* (X). Heavy gale with R, H and S.—*Llanvihangel Court* (XI). High wind, with R and H.—*New Galloway, Glenlee* (XII). Heavy R and H showers.—*Colmonell* (XIV). H and S

* See also *Met. Mag.*, December, 1897, p. 170, and January, 1898, p. 181.

showers.—*Stronvar* (XVI). High wind, sleet and S.—*Drumnadrochit* (XVIII). Gale.—*Cork, Wellesley Terrace* (XX). L.—*Broadford, Hurdlestown* (XX). Severe N.W. gale.—*Miltown Malbay* (XX). Gale with L and H.

28th and 29th.—*Birchington, Thor* (II). Gale commenced with squalls from W., increasing in violence on 29th from N.W., and doing immense damage.—*Sheppey, Leysdown* (II). Westerly gale.—*Fingringhoe* (IV). Tremendous gale with tidal wave.—*Colchester, Lexden* (IV). Severe gale.—*Ashburton, Druid* (V). H showers.—*Bedworth Cemetery.* (VI). Violent gale with H and sleet.—*Bolton, The Park* (VIII). N.W. gale, T, L, H and S.—*Coolkelure* (XX). Very rough gales.

28th—30th.—*Abergwesyn* (XI). Stormy with H daily.

29th.—*Rochester, Hoo St. Mary* (II). Gale and extraordinarily high tide, the Thames and Medway overflowed their banks and inundated thousands of acres of land.—*Crossness* (II). W.N.W. gale all day, 45 to 50 miles per hour, and very high tide which breached the river bank. Tide registered 16 ft. 4 in. above datum at Crossness.—*Witham, Freebournes* (IV.) Great storm of wind, and extraordinarily high tide overflowing thousands of acres of land.—*Aylsham, Woodgate* (IV). Disastrous gale. Salt spray from the sea was driven inland 20 miles, and deposited on windows facing N. at Aylsham and at Twyford Hall. Great damage was done to the sea banks.—*North Walsham, Worstead* (IV). Heavy N.N.W. gale, with T and L, doing much damage.—*Knaresborough, Farnham* (IX). Gale with L and S.—*Llandefaelog-fach* (XI). Brecknock beacons white with S.—*Douglas, Victoria Road* (XI). Strong gale, W.S.W. to N.W., furious at night, with much L.

29th and 30th.—*Middlesborough, Ormesby* (IX). S, H and R.

30th.—*Blundellsands, Park Corner* (VIII). R 1·88 in., the greatest fall in 24 hours since July 14th, 1877.—*Milnrow, Piethorne* (VIII). In 17 days from this date 8·02 in. of R fell, the largest fall in 17 days in the 11 years recorded.—*Colmonell* (XIV). H or S showers.—*Coolkelure* (XX). T and L at night.—*Miltown Malbay* (XX). Stormy with T, L and H.

DECEMBER.

1st.—*Broxbourne* (III). S.—*Epping* (IV). S.—*Gloucester, Churcham* (VI). Forty-four spring and summer flowers out in profusion.—*Astle Hall* (VIII). S in early morning.—*Lilliesleaf, Riddell* (XII). S.

2nd and 3rd.—*Birchington, Thor* (II). H showers.—*Hastings, Hollington* (II). S.

3rd.—*Further Barton* (VI). S.—*Coventry, Priory Row* (VI). S, melting quickly.

3rd and 4th.—*Duddington* (III). S.—*Great Barrington* (VI). S.

4th.—*Rotherby Hall* (VII). Half-an-inch of S on the ground.—*Hemingby* (VII). S nearly all day.

5th.—*Miltown Malbay* (XX). Squally with heavy H.

5th—14th.—*Malham Tarn* (IX). S daily.

6th.—*Carlisle, Rose Castle* (X). Severe but short TS.

6th—8th.—*Southport, Hesketh Park* (VIII). H.

7th.—*Fordingbridge, Wood Green* (II). T, H and 1·25 in. of R.—*Duddington* (III). Gale with H and R, slight flood on the Welland.—*Penzance, St. Clare* (V). H and sleet.—*Long Ashton* (V). Gale and heavy R.—*Upper Midhope* (IX). The Little Don river rose higher than for about 10 years.—*Abergwesyn Vicarage* (XI). Stormy, with R, H and S.—*Lilliesleaf, Riddell* (XII). S.—*Colmonell* (XIV). Heavy S shower.—*Invershin* (XIX). T.

8th.—*Broxbourne* (III). T, S and R.—*Shenfield* (IV). T and L.—*Writtle* (IV). Sharp TS between 1 and 1.30 p.m. One vivid flash of L at 1.15 p.m., then a fall of crystallized S (not H) for 8 or 10 minutes. Bright sunshine before and after the storm. Wind boisterous.—*Campden, Hidcote* (VI). Heavy shower of S.—*Ross, The Graig* (VI). Sharp S storm.—*Llandefaelog-fach* (XI). Stormy, with H, R, S and T.—*Glenlee* (XII). Heavy R and S showers, and T and L.—*Colmonell* (XIV). L.—*Stronvar* (XVI). Gale, S and sleet.—*Derry Castle* (XX). Squalls of sleet, S and H.—*Broadford, Hurdlestown* (XX). N.W. gale, with showers of R and H.—*Miltown Malbay* (XX). Stormy, with T and L.

8th and 9th.—*Southport, Hesketh Park* (VIII). Moderate to strong gale from W.—*Ulpha School* (X). H, R and S.—*Cork, Wellesley Terrace* (XX). A little S.

9th.—*Ashburton, Druid* (V). Heavy H and S at 4 p.m.—*Llanvihangel Court* (XI). Stormy, with H.

10th.—*Llandefaelog-fach* (XI). Stormy, with heavy showers and T.

11th.—*Southport, Hesketh Park* (VIII). Moderate to fresh gale from W. to W.N.W. from about 3 a.m. to 3 p.m.

12th.—*Witley, Fernside* (II). Intense darkness with fog from 1 p.m. to 1.45 p.m., followed by S and R.—*Blandford, Whatcombe*

(V). Sleet and S.—*Southport, Hesketh Park* (VIII). L.—*Inver Braan* (XVI). S.

13th.—*Maiden Bradley* (V). T, L and 1·20 in. of R.—*Cranmore Hall* (V). Heavy TS in the evening.

14th.—*Kensington, Edith Road* (I). S.W. gale in early morning, T and L at night.—*Abinger Hall* (II). Sharp TS.—*Wallington* (II). Violent TS with H.—*Croydon, Duppas House* (II). T and H.—*Surbiton* (II). L and T at night and in early morning of 15th.—*Ryde, Thornbrough* (II). TS.—*Emsworth, Redlands* (II). T, L, H and R.—*Broxbourne* (III). S.W. gale.—*Shenfield* (IV). T and L at night.—*Sudbury, Friars Street* (IV). L.—*Mere Down* (V). Severe TS at night, with very vivid L. A pinnacle of a church at Warminster was shattered in early morn of 15th, and damaged the adjoining house.—*Bishops Cannings* (V). T and H squalls at night.—*Ashburton, Druid* (V). T and L.—*Further Barton* (VI). TS.—*Douglas, Victoria Road* (XI). T, S and H.

15th.—*Ealing, Gordon Road* (I). Primroses in full bloom in the open.—*Chiddingfold* (II). Severe TS and L at 3 a.m.; R ·80 in.—*Blackheath* (II). S.W. gale, and about 4 a.m. T, L and H so heavy that the windows were expected to break. Three hours after, shovels full of H and pieces of ice were found in the yard.—*Crossness* (II). T and L, with H, R and wind at 4 a.m.—*Blandford, Whatcombe* (V). T and L.—*Miltown Malbay* (XX). Gale from S., with T and L.—*Galway, Queen's College* (XXII). Very heavy squalls at night, with L and T.

16th.—*Cork, Wellesley Terrace* (XX). S.W. gale.

16th—20th.—*Dowlais, Gwernllwyn* (XI). Foggy.

17th.—*Ross, The Graig* (VI). Wye in high flood (11 ft.).—*Meltham, Harewood Lodge* (IX). Min. temp. 53°·2.

17th and 18th.—*Cheltenham* (VI). The warmest December days for at least 20 years.

18th.—*Upminster Hall* (IV). Thick fog.—*Astle Hall* (VIII). Dense fog all day.

20th.—*Sudbury, Friars Street* (IV). Aurora.

23rd and 24th.—*Maidenhead, Castle Hill House* (II). Very thick fog.

24th.—*Sudbury, Friars Street* (IV). Thick fog.—*Meltham, Harewood Lodge* (IX). Very rapid rise of temp. Sharp frost all the morning; a puff of warm air at 0.10 p.m.—Temp. at 0.15 p.m. 29°·7, at 0.30 p.m. 40°·8, at 0.45 p.m. 44°·1. A rise of 11°·1 in 15 minutes, and of 14°·4 in 30 minutes.

25th.—*Ross, The Graig* (VI). Skating.

26th.—*Woodlawn* (XXII). In 10 hours during night, 1.85 in. of R fell.

26th—31st.—*Buttermere, Hassness* (X). In the six days 11·29 in. of R fell.

27th.—*Nether Parkley* (XIII). R 1·21 in., which, falling when the ground was frozen, produced a flood on the (Linlithgowshire) Avon beyond all record.

27th—30th.—*Rendlesham Hall* (IV). Heavy gales from S.W.

28th.—*Mere Down* (V). L.—*Carlisle, Rose Castle* (X). Severe but short TS.—*Cork, Wellesley Terrace* (XX). Strong gale from S.W.

28th and 29th.—*Holne Vicarage* (V). R 1·13 in. on 28th and 3·85 in. on 29th. The only other falls exceeding three inches since 1870, are: 3·61 in. (January 8th, 1874), 3·93 in. (July 14th, 1875), 3·38 in. (October 26th, 1876) and 3·16 in. (April 15th, 1877).

28th—31st.—*Brampton, Denton House* (X). L daily.

29th.—*Westbourne Grove* (I). Severe S.W. gale.—*Hazelbury Bryan Rectory* (V). Strong S.W. gale and 2·60 in. of R.—*Torquay, Cary Green* (V). Gale and 2·14 in. of R. In the 21 hours that the gale lasted, 2·49 in. of R fell.—*Torquay, Watcombe Park* (V). The most continuous day of R and strong gales ever remembered. R 1·73 in.—*Holne Vicarage* (V). R 3·85 in.; only once exceeded since 1870.—*Bovey Tracey, Colehays* (V). Terrific gale and 3·63 in. of R; the greatest fall on record.—*Ludlow, The Sheet* (VI). R 1·29 in.; the largest fall since the record began in January 1895. Between 4 a.m. and 9 a.m. ·27 in. fell, so that the total fall was really 1·56 in.—*Dowlais, Gwernllwyn* (XI). S. and S.W. winds; great floods in the district; R 3·30 in., being the greatest for 24 hours in the 11 years recorded.—*Llandovery* (XI). R 1·62 in.; the heaviest fall since November, 1894.—*Taff Fechan, Neuadd Res.* (XI). R 3·70 in.—*Killarney* (XX). T and L.

29th and 30th.—*Leysdown* (II). S.W. gales.—*Emsworth, Redlands* (II). S.W. gale.—*Ross, The Graig* (VI). Strong gale.—*Abergavenny, Dyne House* (XI). Very high flood on the Usk.—*Brecon, Tymawr* (XI). R 3·72 in. in the two days.—*Colmonell* (XIV). L.—*Miltown Malbay* (XX). Stormy, with T, L and H.

30th.—*Grange, Belmont* (VIII). T, H and S from 5 to 6 p.m.—*Cartmel, Fell Vicarage* (VIII). Severe TS and intensely vivid L.—*Ulpha School* (X). T and L.—*Armathwaite Hall* (X). Slight TSS and L throughout the night.—*Carlisle, Rose Castle* (X). Severe but short TS.

—*Brecknock, The Barracks* (XI). Great gale and 1·90 in. of R. The whole Usk Valley here was flooded, and the suburb of Llanfaes was under water. The force of the wind was very great, and much damage was done by it.—*Dalbeattie, Richorn* (XII). TS at 9 p.m.—*Glenlee* (XII). T and L.—*Lochmaddy* (XVIII). Very heavy S.W. gale.—*Drumnadrochit* (XVIII). S.W. gale.—*Watten, H.R.S.* (XIX). S.W. gale at night.—*Galway, Queen's College* (XXII). T and L.

30th and 31st.—*Southport, Hesketh Park* (VIII). L.

31st.—*Capel, The Cottage* (II). TS.—*Hedsor* (III). H squall at 1 p.m. —*Cheltenham, Hewletts* (VI). Raspberries were picked in the open in splendid condition.—*Ross, The Graig* (VI). Wye again in flood (11 ft. 6 in.).—*Armathwaite Hall* (X). The highest floods for some years.

OBSERVERS' NOTES ON THE MONTHS.

JANUARY.

1. *Muswell Hill.* The month opened with 3 dry days, followed by 8 wet ones; the next 9 days were dry, with the exception of ·16 in. falling as S on the 16th, while during the remaining 11 days R or S fell on 6. Total R ·09 in. above the average of 25 years.—*Finchley, Etchingham Park.* The former half of the month was much wetter than the latter half; three-fifths of the total falling between the 4th and 10th. S fell on 6 days. Total R nearly 25 per cent. above the average.

II. *Abinger Hall.* Very seasonable; real winter weather from 18th to the end, with heavy S storms on 22nd and 31st.—*Wallington.* Comparatively cold, sunless, and unhealthy; characterized by low max. temp. and a great quantity of cloud. R slightly below, but number of rainy days above, the average; S fell on many days. Duration of sunshine much below average.—*Sheppey, Leysdown.* Generally cold and wet, with some very fine days.—*Lewes, Saxonbury.* Mild till 7th, then cold with much fog and mist till 20th; bright and frosty after the 23rd.—*Maidenhead, Castle Hill House.* Mild with average R. Heavy S showers on 22nd and 23rd, wind mostly N.W. and S.W.

III. *St. Albans, The Grange.* Cold, especially the second half, with much S.—*Culham Vicarage.* Wet and mild in the first part; cold with S showers after the 15th.—*Pitsford, Sedgebrook.* R ·83 in. more than the average. S on 9 days.

IV. *Colchester, Lexden.* Damp with little frost in the first half, but almost continuous slight frost from 16th to 29th, S on 7 days.—*Ipswich, Bishops Hill.* A typical month, with severe N.W. and N.E. winds, and drifting S on 22nd and 23rd. R ·12 in. above the average. —*Hillington School.* R below the average, but a large number of days on which R or S fell.

V. *Bishops Cannings.* R ·17 in. less than the average. S on 5 days.—*Tavistock, Rose Villa.* Cold and rather dry. The max. temp.

rose to, or above, 50° on only one day, and was below 40° on 10 days. There was S on the ground from 22nd to 29th, but the max. depth was 1 in. on 27th.—*Wellington, The Avenue.* R and temp. slightly below the normal, but sunshine very deficient in the first part. Roughly speaking, the first half was mild, and the second half cold.

VI. *Cirencester, Further Barton.* A very cold month. Frost every day after the 13th, with occasional S showers, and a heavier fall at the close. No sunshine from 8th to 13th inclusive, or from 28th to 31st.—*Ross, The Graig.* Very wet, with nearly average temp. for the first ten days; afterwards cold, damp, and uncomfortable. Continued frost from 14th to 29th, severe from 17th to 27th.

VII. *Worksop, Hodsock Priory.* The first half wet, the remainder cold and wintry. Day temp. very low, but no severe frost. R ·57 in., and duration of sunshine slightly, above the average. Mean temp. 2°·4 below average.

VIII. *Chelford, Astle Hall.* Very cold. More or less frost almost every day.—*Bolton, The Park.* Cold, particularly in the latter half. S on 8 days. Frost in shade on 16 days. Duration of sunshine 26 hours, slightly more than the average. R ·78 in. below the average.—*Southport, Hesketh Park.* Cold and dry. Decidedly sunny, yet notable for equable temp. Mean temp. 3° below the average for 25 years. Fairly mild during the earlier half, much cooler generally after, with frequent falls of S in the last 10 days. Frost in shade on 17 days, and on grass on 25 days. Total R barely one inch, and little more than one third of the average. Underground water inclined to fall. More bright sunshine than usual, and several very clear nights. S on 7 days, the total depth being 4½ inches.—*Seathwaite Vicarage.* A month of slight downfall, with continuously severe weather after the first week.

X. *Ulpha Vicarage.* Though the temp. was low after the 12th, there was no very extreme cold. R less than one-third of the average of 9 years.—*Brampton, Denton House.* The driest January since observations commenced in 1885. R only ·44 in.

XI. *Llanfrechfa Grange.* Mild and open, sharp frosts only from the 23rd to the end.—*Llandefaelog-fach.* Very dull and dark, with marked absence of sunshine. Continuous N.E. wind from 8th to 22nd.—*Douglas, Victoria Road.* A beautiful "New Year's Day" was succeeded by a wet and very stormy week. Brilliantly fine and generally frosty weather from 11th to 20th, was followed by strong N.E. and N.W. winds, gales and S. The frost broke up on 26th, and nearly an inch of R fell on 29th and 30th.

XII. *Lilliesleaf, Riddell.* A very variable month, but the variations were not great. S fell on 5 days.

XIV. *Girvan, Pinmore.* Exceptionally dry and cold. R 3·79 in. below, or little more than one quarter of, the average. Mean temp. 2°·9 below the average.

XV. *Craigend Castle.* The first half was wet and stormy, the second half frosty. Total depth of S seven inches.—*Oban, The Corran.* Hard frost during the greater part of the month.

XVI. *Dollar.* Dull and wet in the first half; frost and S in the second.—*Coupar Angus.* R or S fell sparingly on 15 days, the total being ·80 in. less than the average. Mean temp. 2°·6 below average.—*Ballinluig.*—There was no frost in screen during the first nine days, but frost occurred each day afterwards to the end. Slight S fell on 10th, and the ground was more or less grey till 31st.

XVIII. *Glenaladale.* A very fine winter month. Mean temp. 32°·9. —*Lochmaddy.* Favourable, except for a bad storm of wind and S on 25th. Frost only on 6th.—*Fort Augustus.* R 1·12 in., the smallest fall in January since observations began in 1884.

XIX. *Watten, H.R.S.* The first week fine, with frost and thaw in turns—the remainder a series of gales and S storms; the last week very severe.

XX. *Cork, Wellesley Terrace.* R ·41 in. less than the average, more than three-fourths of the total falling in the first half. Long continued, but not extreme, cold.—*Derry Castle.* Unusually mild. R 42 per cent., and rainy days 21 per cent., below the average.—*Castle Lough.* Fairly fine and mild, with occasional frosts about the middle.—*Hurdlestown.* Very fine on the whole; cold and frosty. R 1·24 in., and rainy days 6, below the average of 12 years.—*Miltown Malbay.* The first week wet; the remainder, having a tendency to frost with sunny skies, was most enjoyable. No high winds.

XXI. *Templeudigan, Ballindoney.* Heavy R in the first week, otherwise fairly fine. Very cold from 15th to 18th.—*Kilkenny, Sion Villa.* Very severe weather; hard frosts on 14th and 15th, and from 19th to 23rd. Ice very strong; ten days' skating. Thick and very wet fogs on six days.—*Rathmines, Leinster Road.* January opened mild and wet, the only severe frost of the year occurring during the last fortnight.

XXII. *Tuam, Gardenfield.* Mostly fine. R more than a third below the average. Frost on 14 nights. A little S on 25th and

26th.—*Lawderdale.* The middle of the month was dry with frost, the beginning and end were wet.

XXIII. *Belfast, Springfield.* Not bad on the whole, but very variable. No severe weather.

FEBRUARY.*

I. *Kensington, Edith Road.* Singularly warm and very wet. Mean temp. 5°·2 above the average. In the last ten days the temp. only once fell below 45°.—*Muswell Hill.* R 1·25 in., or 70 per cent., above the average of 25 years.—More than two-thirds of the R fell in the first week.—*Finchley, Etchingham Park.* Very wet, the total R being two-and-a-half times the average of 11 years. The first half was much the wetter; five-sixths of the total falling in the first 13 days.

II. *Abinger Hall.* Mild and open throughout, and quite springlike towards the end.—*Wallington.* Exceedingly warm, with very little sun and much R. By far the warmest February of the past twelve, and, with the exception of 1888, the least sunny. R ·89 in. above average. Duration of sunshine 33 hours, 29 hours less than the average.—*Hythe.* The first fortnight was wet and unsettled, the last fortnight very fine and dry.—*Birchington, Thor.* Generally fine and mild; duration of sunshine 68 hours.—*Lewes, Saxonbury.* Calm and mild, with much mist and fog. Showery till 14th; afterwards fine. —*Maidenhead, Castle Hill House.* The first half was rather cold, with S on 1st and 2nd; but the latter half much milder. R above the average. Wind mostly S.W. and N.W.

III. *St. Albans, The Grange.* Warm and wet; floods in the early part. —*Culham Vicarage.* Wet and rather cold in the first part, dry and mild in the latter.—*Oxford, St. Giles'.* Very wet and mild, with extensive floods. R 1·19 in. above the average of 10 years.—*Bloxham Grove.* Very wet and cold during the first half; much warmer and pleasant in the last half.—*Duddington.* The beginning of the month was foggy, with heavy falls of S and R, and floods were out from 4th to 7th. Milder towards the close.

IV. *Lexden, Hill House.* Mild, with several days unusually warm and sunny.—*Sudbury, Friars Street.* Very little frost throughout; wet at the commencement, and floods on low-lying meadows.—*Ipswich, Bishops Hill.* R ·65 in. above the average; more than three-fourths of

* See also *Met. Mag.*, March 1897, p. 21.

the total falling in the first five days. Fine and dry weather after the first week.—*Denver Rectory.* Very wet during the first five days, hundreds of acres being under water in the fens. The water on the land-side of Denver sluice was 5 inches higher than it had been for 40 years.

V. *Bishops Cannings.* R 50 per cent., and rainy days 4, above the average.—*Tavistock, Rose Villa.* Warm, wet, cloudy and very damp and foggy. The temp. rose to, or above, 50° on 14 days, and on 10 days did not fall below 41°.—*Wellington.* The first part was excessively wet and gloomy, the total R being 1·75 in. above the average. Probably one of the mildest Februarys on record, the temp. showing an excess of about 6°·5. Entire absense of frost in shade.—*Glastonbury, High Street.* Heavy R early in the month caused the arterial streams to overflow their banks.

VI. *Clifton, Pembroke Road.* Almost constant R for the first five days, the monthly total was 1·31 in. above the average of 40 years.—*Further Barton.* Mild and changeable, with but little clear sky. More than four-fifths of the R fell in the first 12 days.—*Bredons Norton.* Heavy R in the early part caused the Avon to overflow, and hundreds of acres were under water from 2nd to 11th.—*Ross, The Graig.* The cold weather which had lasted—with intervals in December—since October 17th, gave way on February 6th to a mild period, which continued to the close; the max. and min. temp. being respectively 2°·7 and 4°·5 above the average of 35 years, and the warmest since 1877.

VII. *Worksop, Hodsock Priory.* During the first few days much cold R and S fell, causing floods; the rest of the month was mild, with high wind near the close. The wettest February since 1881 (R 1·37 in. above the average) and the warmest since 1885, the mean temp. being 2°·7 above the average, and the mean min. only 0°·3 lower than in April.

VIII. *Chelford, Astle Hall.* Fine and mild, with occasional gales of wind; only three days with frost.—*Bolton, The Park.* The first week was dull and cold, with a heavy fall of S on 1st, which remained on the ground until 8th, when milder weather set in. R 1·30 in., and mean temp. 3°·2, above the average. Duration of sunshine 23 hours, or little more than half the average.—*Southport, Hesketh Park.* By far the most cloudy February during 25 years. Mean temp. 2° above the average. Cold during the first week, but subsequently much milder, and very warm during the last 10 days. Frost in shade on 3 days only, and on grass on 11 days. Daily range of temp. extremely small, owing to the generally overcast sky. Total R ·50 in. in excess of the

average. Not much more than half the normal duration of sunshine, and the greatest amount of cloud for any month yet recorded. Ice upon the lake from 1st to 9th, the maximum thickness being 2 inches on 1st and 2nd. S on 1st, 2nd and 3rd, the total depth being 3 inches. —*Seathwaite Vicarage.*—Unusually mild with moderate R, only one light fall of S, and little frost.

X. *Brampton, Denton House.* Very mild, the latter part particularly so.

XI. *Llandefaelog-fach.* The early part of the month was cold, dark and wet, with much fog. The latter part brighter, but high winds prevailed for some days.—*Douglas, Victoria Road.* Dull, wet and sunless, with unusually severe gales on 20th, 24th and 25th. Very cold in the first part, mild towards the end.

XV. *Craigend Castle.* The first half was frosty, with S ; the second half wet and stormy.

XVI. *Dollar.* A fair month, with little frost and sunshine in the latter part.—*Coupar Angus.* R ·63 in. less than the average.—*Ballinluig.* Slight S covered the ground during the first week ; mild weather occurred from 16th to 23rd, and the remainder was squally and showery.

XVIII. *Glenaladale.* A seasonable month, wet but cold—*Loch Maddy.* Except the first two or three days the month was very boisterous, the wind frequently reaching hurricane force in the last ten days ; prevailing direction, S. and S.W.

XIX. *Watten.* Three weeks of gentle thaw, followed by a series of gales with showers of sleet and S.

XX. *Cork, Wellesley Terrace.* The early part of the month was very foggy, and the atmosphere was moist throughout. There was no air-frost, an occurrence unprecedented in 14 years. R below, and temp. above, the average.—*Derry Castle.* Damp and mild. R 4 per cent. below, but rainy days 15 per cent. in excess of, the average.—*Nenagh, Castle Lough.* Damp and mild, but R not excessive.—*Broadford, Hurdlestown.* Mild and damp, but on the whole favourable. R ·09 in. below, and rainy days 2 above, the average.—*Miltown Malbay.* Damp and mild, without heavy R until near the end.

XXI. *Templeudigan, Ballindoney.* Very mild and open, with no S and no heavy R.—*Kilkenny, Sion Villa.* Fine and fairly mild from 2nd to 11th and for the ten days ending 26th, otherwise very cold and raw. Thick, wet fogs on 5 days. Gales from 18th to 28th.—*Rathmines, Leinster Road.* February commenced wet and foggy, but the second

half was dry and springlike. Very mild throughout, being warmer than March, and as warm as April.

XXII. *Tuam, Gardenfield.* A mild month with no S, and frost on only about 3 nights. R about the average.—*Lawderdale.* Cold, wet and stormy.

XXIII. *Belfast, Springfield.* Dull and damp at the beginning, with heavy fog on 5th; the sun first seen on 6th. Showery and stormy during the last ten days.

MARCH.

I. *Kensington, Edith Road.* Very warm. Temp. 3°·8 above the average; making the fifth consecutive warm March, and by far the wettest in 14 years. R two-and-a-half times the average.—*Muswell Hill.* The R, 3·63 in., which fell on 23 days, is rather more than double the average of 25 years; more than four-fifths of the total fell in the first 18 days.—*Finchley, Etchingham Park.* Very wet. The R, which fell on 21 days, is 1·84 in., or 93 per cent., above the average of 11 years. It is the wettest March since 1888, when 4·12 in. was recorded. The former half of the month was much wetter than the latter, 3·11 in. falling in the first 18 days.

II. *Abinger Hall.* Very wet and generally mild and open. Not much sunshine.—*Wallington.* Very warm, wet and stormy; by far the wettest March in the last 12 years. R 2·34 in., and number of rainy days 4, above the average, yet the duration of sunshine shows a slight excess.—*Tenterden.* R 4·18 in. The wettest March since 1888, when 4·36 in. fell.—*Sandhurst Rectory.* Exceptionally wet, R 2·85 in. above, or much more than twice, the average of 20 years.—*Tunbridge Wells, Camden Park.* R 4·79 in., the greatest fall in 14 years, and rather more than twice the average.—*Birchington, Thor.* The wettest March on record. Very stormy, S. and S.W. winds prevailing. Duration of sunshine, 164 hours.—*Sheppey, Leysdown.* Generally wet, cold and stormy, with some very fine days. R the highest recorded in March from 1887-97, and 1·81 in. above the average.—*Chislehurst, Southlaund.* R the greatest in March in 18 years, being 1·79 in. above the average (1·49 in.) for that period.—*Lewes, South Malling.* The wettest March in the 30 years recorded. R 3·94 in.; though that of 1888 nearly equalled it, with 3·87 in.—*Maresfield, Forest Lodge.* The wettest March recorded since observations commenced in 1846. R 2·95 in. above, or considerably more than twice, the average.—*Osborne,* R

4·81 in., the greatest recorded in March in 40 years.—*Christchurch, Mudeford.* R 4·69 in., the heaviest since the record commenced in 1869.—*Denford Park.* Unusually wet, being the third wet March in succession. R 4·47 in.

III. *St. Albans, The Grange.* Rather warm, and very wet. R 3·64 in.—*Oxford, St. Giles'.* Very stormy and wet, with constant gales from the westward, and a good deal of L; warmer than any March in the past 10 years, except 1893, and wetter than any in the same time.—*Bloxham Grove.* One of the wettest Marches ever known, with a great absence of N.E. winds.—*Northampton, Sedgebrook.* R 1·97 in., above the 1880-89 average.—*Duddington.* Wet and boisterous, with high floods on the Welland from 14th to 17th. Mean temp. 44°·4.

IV. *Fingringhoe.*—A showery month, with absence of March dust. *Colchester, Lexden.* The first half was showery, with slight frost at night; the latter half mild, with a succession of W. winds. Notable absence of E. winds.—*Ipswich, Bishops Hill.* R 1·24 in. above the average. The first 4 days, and also the last 5, were very stormy.—*Hillington School.* A rainy month, with many wet days.

V. *Bishops Cannings.* R 2·06 in., and rainy days 10, above the average. No E. winds.—*Tavistock, Rose Villa.* Wet, warm and stormy. R fell every day but 7th, 29th and 30th, and was recorded on 16 consecutive days ending 23rd.—*Wellington, The Avenue.* One of the wettest Marches on record, with more than double the normal R. The first part was excessively wet, rough and unsettled, with normal temp.; the second part rather quieter and drier, excepting the last three or four days. Mean temp. 45°·6, much above the average. S on 4 days.

VI. *Clifton, Pembroke Road.*—Very wet and boisterous; the wettest March since 1889, and with that exception, since 1867.—*Further Barton.* Remarkable for wind, often amounting to a gale. After the 15th a rise of temp. took place, followed by a sudden fall on 29th.—*Ross, The Graig.* Extremely boisterous till the 30th. R exceeded in March only in 1867 and 1888 since the record commenced in 1858. There was scarcely any frost in screen, and the average min. temp. is the highest recorded, the average max. also is high.

VII. *Worksop, Hodsock Priory.* Warm, especially at nights, with strong winds, similar in many respects to March, 1896, but with more R, the total being ·79 in. above the average. Mean temp. 3°·7 above average, and mean pressure the lowest in any month since February, 1879. Duration of sunshine 95 hours.

VIII. *Astle Hall.* Cold and windy till 14th, then much milder till near the end, when it turned cold again.—*Bolton, The Park.* For the first 15 days the temp. was normal, the remainder being unusually mild. R ·49 in. above the average. H on four days. Duration of sunshine 70 hours, or 11 hours less than the average.—*Southport, Hesketh Park.* Much more cloudy than any other March during 25 years, and notable for similarly exceptional equability of temp. Mean temp. 2°·2 above average, owing to the warm weather and high night temp. from 17th to 28th. Frost in shade on 3 days, and on grass on 8 days. An overwhelming preponderance of strong S. and W. winds. Total R more than ·50 in. above the average, and rainy days numerous. Sunshine somewhat under the average. Sea warm, but much disturbed.—*Seathwaite Vicarage.*—Almost continuous R; only three days without a measurable fall. The closing days were marked by sharp frosts.

IX. *East Layton.* Very changeable with heavy R, retarding agriculture.

X. *Ulpha Vicarage.* Very wet throughout, though with few excessive falls. R 4·14 in. above the average of 9 years.—*Brampton, Denton House.* Very wet. R 4·45 in., or 2·15 in. above the average; only 4 rainless days.

XI. *Llanfrechfa Grange.* Constant R and S.W. winds, but mild. Not like March.—*Llandovery.* Very wet. R 6·89 in. on 29 days.—*Llandefaelog-fach.* Very wet, unusually high winds prevailing, with but little intermission. A few spring-like days in the latter half.—*Douglas, Victoria Road.* Sunless, stormy and rainy almost without precedent. Gales or strong winds occurred on 21 days, while R fell on 27 days. As the result, vegetation hardly moved, though the third week was unusually warm.

XII. *Lilliesleaf, Riddell.* An unusual amount of R and continuously showery weather; gales, sleet, S, and everything disagreeable. Prevailing winds S.W., W., and N.W. High temp. generally, but very low during the last three days.

XIII. *Edinburgh, Blacket Place.* Very stormy and unsettled, closing with S and sharp frost. Mean pressure (cor. and red.) 29·482 in., being the lowest in March, with three exceptions, since 1769.

XV. *Oban, The Corran.* The wettest and stormiest March remembered. R 4·52 in. above, or more than twice, the average.

XVI. *Dollar.* Cold and wet throughout.—*Coupar Angus.* Excessive R; the greatest fall in March in 20 years. Mean temp. nearly

2° above the average.—*Ballinluig.* Cold and wet throughout, with very little sunshine.

XVIII. *Glenaladale.* Very wet, cold, stormy and disagreeable, with much sleet, and S on the hills. Mean temp. 40°·6.—*Lochmaddy.* Not so remarkable for the amount of R which fell on any one day, as for the continuous "soaky" state of the atmosphere. Not one day till the 28th had any drying power. R 2·90 in. above the average of 12 years.

XIX. *Watten.* Very wet and boisterous; only two dry days. A series of storms of wind, R and S.

XX. *Dunmanway, Coolkelure.* Very stormy and wet from beginning to end. Farm-work at a standstill throughout.—*Cork, Wellesley Terrace.* R excessive, more than double the average, and the greatest in March in 45 years. The absence of the usual E. winds was remarkable. —*Derry Castle.* Boisterous and excessively wet throughout. R 75 per cent., and rainy days 41 per cent., in excess of the average.—*Nenagh, Castle Lough.* Fearfully wet, cold and stormy; only 5 days without R. The wettest March in the 23 years recorded here, the fall being more than double the average.—*Broadford, Hurdlestown.* The wettest March on record here, and farm work very backward. R 1·79 in., and rainy days 5, above the average of 12 years.—*Miltown Malbay.* Following a very moist month, March was the rainiest remembered in this district; and having its usual attributes of chilling cold, inclemency and storm, it kept all agricultural work at a standstill.

XXI. *Templeudigan, Ballindoney.* Very wet. R 6·55 in., and crops got in very late.—*Kilkenny, Sion Villa.* Stormy and cold, very raw and damp. Gales on 5 days.—*Rathmines, Leinster Road.* Wet and stormy, with R much above the average.

XXII.—*Tuam, Gardenfield.* The wettest March since the record commenced. R double the average, and falling nearly every day. Frost on only a few nights. Showers of S on the first 4 days, and on 31st.—*Lawderdale.* Very wet, cold and stormy.

XXIII. *Belfast, Springfield.* A record March, both for amount of R and rainy days. The greatest previously recorded was 5·04 in. in 1881. Though nearly constantly wet, there was no heavy fall, nor any very severe weather. The ground too wet to allow much seed to be put in. —*Carrablagh.* R 7·02 in. on 29 days; nearly double the average of ten years.

APRIL.

I. *Finchley, Etchingham Park.* R very nearly 50 per cent. above the average of 11 years. Nearly three-fourths of it fell in the second half.

II. *Abinger Hall.* Though showers were frequent for the first three weeks, they were not heavy; and towards the end it was much drier, and work on the land was not hindered.—*Wallington.* Cool, and comparatively dry and sunless. R ·35 in., and mean temp. 0°·5, below the average. Duration of sunshine 119 hours, or 48 hours less than the average.—*Hythe.* Very unsettled and showery throughout, with cold, N.E. winds.—*Keston Tower.* Very windy, with a fair amount of R.—*Maidenhead, Castle Hill House.* A rather raw month, with average R, and low temp. at night. Wind mostly N.W. or N.E.

III. *Culham Vicarage.* A cold and showery month, with a few warm days at the end.

IV. *Colchester, Lexden.* Rather cold till the 27th, with many cloudy days.—*Sudbury, Friars Street.* Rather unsettled; cold at the commencement. Variable temp. towards the end. T on 4 days.—*Ipswich, Bishops Hill.* Rather cold, with many frosty nights and some high, cold, winds. R only ·06 in. above the average.

V. *Tavistock, Rose Villa.* Wet and rather cold, R falling on 24 days. The temp. rose above 60° on 3 days. S fell on 3 days.—*Ideford.* R 4·37 in.; the greatest fall in April in 12 years.—*Wellington, The Avenue.* Wet and stormy, with more E. wind than in March, which made the air very raw and cold at times. R largely in excess of the average, and temp. generally low, except in the last week.

VI. *Clifton, Pembroke Road.* R an inch-and-a-half above the average of 40 years.—*Further Barton.* Very changeable; many fine days, but little warmth until after the 25th.—*Ross, The Graig.* Miserably cold and wet till the 25th, the max. temp. on 19 days not reaching 55°; comparative warmth from 26th to 29th. R and rainy days above the average. Only one frost at all severe.

VII. *Worksop, Hodsock Priory.* Rather showery, with some sharp frosts at the commencement. Mean temp. the same as in March, and the nights colder. Duration of sunshine 136 hours, or 6 hours above average. R ·43 in. less than the average.

VIII. *Astle Hall.* Cold, wet and frosty till about the 18th. Frost on 8 days.—*Bolton, The Park.* R, S or H fell on 16 days, the total being 1·17 in., or more than 50 cent., above the average, and the greatest on record here. Mean temp. 4°·3 below the average. Dura-

tion of sunshine 114 hours, or 4 hours more than the average.—*Southport, Hesketh Park.* Wet, cloudy and somewhat cool, E. winds predominating. Mean temp. 1°·2 below the average. Cold during the first week, warm on 13th and towards the close of the month. Frost in screen on 4 days and on grass on 13 days. No gales. Total R more than an inch in excess of the average, and spread over a fair number of days. Underground water high for the season. Less sunshine than usual.

IX. *Thixendale.* The month began with much S, and was very winterly. Keen frost occurred on 26th, which was destructive of plum and apple blossom.

X. *Ulpha Vicarage.* Cold and backward almost throughout. A good deal of frost in the first week. Frequent S, H and cold winds. R 1·22 in. above the average of 9 years.—*Brampton, Denton House.* A cold, barren month, with frost on the first 10 nights.

XI. *Llanfrechfa Grange.* Mild and wet; wind very changeable.—*Llandefaelog-fach.* Very cold and ungenial weather for two-thirds of the month, spring-like towards the end.—*Douglas.* Wild, wet, winter weather prevailed for three weeks, but the last 9 days were fine. Gales occurred on 6 days. S or H on 3 days.

XII. *Lilliesleaf, Riddell.* A disagreable, cold and showery month; particularly the latter half.

XV. *Craigend Castle.* The first part clear and frosty; wet from 11th to 20th, then fine and clear, with a few showers.—*Oban, The Corran.* Wet, cold and backward, maintaining the character of the previous three months. R ·68 in. above the average of 10 years.

XVI. *Coupar Angus.* R ·31 in. above, mean temp. 1°·6 in. below, the average of 17 years.—*Dalnaspidal.* A showery month with S on 13 days.

XVIII. *Glenaladale.* Cold and backward. Mean temp. 42°·6.—*Lochmaddy.* Very raw and cold, except from 20th to 28th.—*Drumnadrochit.* Remarkably cold and inclement. R ·22 in. above the average of 11 years.

XIX. *Scourie.* Very cold and unsettled, and agricultural work much retarded.—*Watten, H.R.S.* Dry and cold, except the second week, which was wet and cold.

XX. *Cork, Wellesley Terrace.* R more than double the average, and the greatest in April in 45 years. Mean temp. 1°·5 below the average.—*Derry Castle.* The wettest April recorded in 20 years. R 101 per cent., and rainy days 44 per cent., in excess of the average.—*Nenagh,*

Castle Lough. A record month for R, the total (5·09 in.) being 2·64 in. above, or more than double, the average of 20 years; only 7 rainless days.—*Broadford, Hurdlestown.* R 1·83 in., and rainy days 7, above the average of 12 years. The wettest April on record. Farm work much delayed.—*Miltown Malbay.* This month gave the greatest R remembered in April; in March and April together 13·30 in. of R fell on 48 days.

XXI. *Templeudigan, Ballindoney.* Very wet and very mild; very heavy R, and only six days fine.—*Kilkenny, Sion Villa.* Very wet, cold and stormy for the first three weeks, with H on 6 days, and S on 14th and 15th; heavy storms off and on from 14th to 17th, and milder weather towards the end.—*Rathmines, Leinster Road.* Cold, dull and showery, with a smaller proportion of E. wind than usual. —*Tuyford.* The greatest R for April (4·54 in.) in a record extending over more than 20 years.

XXII. *Tuam, Gardenfield.* Very wet; R about 2·00 in. more than the average, and falling on 3 out of every 4 days. Frost on only 2 or 3 nights.—*Lawderdale.* Wet and cold. R 5·18 in. on 19 days.

MAY.

I. *Kensington, Edith Road.* Hardly any R during the first 25 days, but the last 6 yielded two-thirds of the average for the month.— *Muswell Hill.* Total R ·51 in., or 26 per cent., below the average of 25 years. In the 20 days, 6th to 25th, only ·01 in. fell; while nearly nine-tenths of the total fell in the last 6 days.—*Finchley, Etchingham Park.* During the first 25 days only ·16 in. of R fell, and an absolute drought of 20 days was broken by only ·02 in. on 11th. R fell on each of the last 6 days, and the total for the month is 28 per cent. less than the average.

II. *Abinger Hall.* Cold N. and N.E. winds, with bright sunshine, prevailed throughout the month, except at short intervals, when it veered to S. and S.W. R much needed for the grass crops before it set in on 25th.—*Wallington.* Somewhat cold, but fairly sunny, and until the last week very dry. R ·78 in. below, and rainy days 1 above, the average. Mean temp. 1°·9 below the average. Duration of sunshine 223 hours, or 16 hours more than the average.—*Hythe.* Rather dry, with strong, cold winds. Frost in shade on 3 days.—*Birchington, Thor.* Cold N.W. and N.E. winds, but fine and bright weather. Duration of sunshine 259 hours.—*Sheppey, Leysdown.* The days were

generally fine and warm, but the nights and early mornings were cold. Prevalent winds, E. and N.E.—*Chichester, West Dean.* Cold, with some destructive frosts cutting off the young oak and ash leaves.—*Maidenhead, Castle Hill House.* A warm month, with very pleasant weather, but a touch of frost on 13th. R less than the average; no heavy falls, and 13 rainless days from 12th to 24th. Wind mostly N.W. or N.E.

III. *Culham Vicarage.* A cold and very dry month till the last few days. —*Oxford, St. Giles'.* Cold and dry. R much needed for the hay. Absolute drought for 15 days ending 26th.—*Bloxham Grove.* Very dry, with cold N.E. winds and frost till 26th; then much more genial. —*Northampton, Sedgebrook.* R 1·22 in. less than, or only two-fifths of, the average.—*Duddington* [*Stamford*]. Cold on the whole, with high N.E. and E. winds. Warmer towards the end of the month.

IV. *Colchester, Lexden.* Cold and dry almost throughout. A very cold period from 10th to 13th, and absolute drought from 12th to 25th.—*Ipswich, Bishops Hill.* R 1·26 in. below, or less than two-fifths of, the average.—*Hillington School.* A dry month. Small falls at the beginning; no R from 9th to 24th, then rainy to the end.—*Blakeney.* Very dry; R only ·63 in., and none between 12th and 25th.

V. *Wellington, The Avenue.* Uncomfortable and trying, being generally cold, with harsh N.W. and N.E. winds. Brilliantly sunny from 16th to 24th, but the winds cool. The last week showery. R rather less than the average.

VI. *Clifton, Pembroke Road.* Very dry from 8th to 26th, with anti-cyclonic N. and E. winds. —*Ross, The Graig.* Very dry till the last week, but no really hot days; only 3 with the max. temp. above 70°. Although no serious frost occurred, the air was generally cold, notwithstanding much sunshine. The cold period from 11th to 14th was very marked this year. Vegetation retarded by the cold, but much refreshed by the copious R at the close.

VII. *Horncastle, Bucknall.* High and very cold winds almost every day up to the 24th, after which the weather was warm and showery, with T at times.—*Horncastle, Hemingby.* A terrible month; bleak, tempestuous and withering.—*Worksop, Hodsock Priory.* Bright and dry, with cold nights and northerly winds. Vegetation backward; R 1·48 in. below the average. Duration of sunshine 233 hours; an excess of 60 hours.

VIII. *Astle Hall.* Cold and wet till the 13th, then hot and dry till about the 27th, when it turned wet and colder.—*Bolton, The Park.*

The first half was changeable, with little R; but from 16th to 24th was almost cloudless. The remainder was changeable, with a fair amount of R. Mean temp. 1°·9 below the average. Duration of sunshine 229 hours; 66 hours above the average, and only once equalled in any month.—*Southport, Hesketh Park.* The sunniest month on record. Dry weather and searching winds. Mean temp. 0°·5 below average. Frost on grass on 5 nights. Relative humidity low. Strong to moderate W. winds until 15th; steady E. breezes generally during the latter half. Very little R except on the last 4 days, and the total under the average. Water in brooks and underground, falling pretty steadily. Much less cloud than usual.—*Seathwaite Vicarage.* The first half was rainy, followed by 11 bright days. Cold northerly winds throughout, and vegetation backward.

IX. *Driffield, York Road.* Mean temp. 48°·2. Mean amount of cloud 6·2.—*East Layton.* Very dry and cold till 24th, but mending during the last five days, when nice rains fell, reviving vegetation.

X. *Ulpha Vicarage.* The very bright, dry weather from 14th to 26th was accompanied by frequent ground frosts, and growth was very small. The days, however, were warmed by the sun, and on the whole it was fine and pleasant. R ·32 in. below the average of 9 years.

XI. *Llanfrechfa Grange.* Very favourable for agriculture; the R at the end being very acceptable.—*Llandefaelog-fach.* The first half was cold and ungenial; the grass min. falling to 19° on 13th. The latter half was more genial, but high winds prevailed throughout. No R fell from 9th to 24th inclusive.—*Douglas.* Very ungenial. Gales, cold, parching winds from N.E., and the partial drought to the 24th, gave crops and seeds no chance. H fell on 4 days. R was very welcome at the month's end, the total fall being below the average.—

XII. *Maxwelton House.* Very dry up to the 25th; R falling on only one night from 9th to 24th. Very fine, bright and hot days from 16th to 24th, with very cold nights and E., N.E. or S.E. winds. In the last week 2·14 in. of R fell—*Lilliesleaf, Riddell.* Cold, boisterous and disagreeable. Comparatively little growth until the 25th, after which there was plenty of R (about one inch) and more warmth. Up to the 25th, the wind was mostly N. or E.; afterwards, S. or S.W.

XV. *Craigend Castle.* The first half cold and showery; the second half close and warm, with nice showers.—*Oban, The Corran.* Exceptionally backward, cold and wet. Mean temp. 4°·8 below the average of 10 years, and the lowest in that time. R 1·11 in. above the average of 10 years.

XVI. *Dollar.* Cold and dry almost throughout.—*Coupar Angus.* On 21 nights the temp. fell below 40°, and frost occurred on 7; the mean temp. for the month being nearly 2° below the average. R about the average, nearly all falling in the last week.—*Ballinluig.* The first 12 days were cold, and from the 13th to the 23rd was dry, sunny and very trying to vegetation; but the R of the remainder of the month came in good time.—*Dalnaspidal, H.R.S.* S on 8 days in the first half of the month.

XVIII. *Glenaladdale.* Inclement generally. The first 10 days extremely severe, stormy and wintry. Vegetation very backward. Mean temp. 48°·9.—*Lochmaddy.* The greater part of May was exceedingly cold, with dry, piercing wind from E. or S.E. Mean temp. 45°·2.—*Drumnadrochit.* Bitterly cold, and vegetation unusually backward. Frost destroyed much of the expanding fruit buds.

XIX. *Watten, H.R.S.* The first half was cloudy, cold and windy, with frosts at night; latter part dry, mild and fine, with some sunny days.

XX. *Cork, Wellesley Terrace.* R ·89 in. less than the average. Absolute drought for 18 days ending 24th, and partial drought for 29 days ending 25th. Mean. temp. 51°·0, or 1°·5 below the average.—*Derry Castle.* The first six days and the closing week were showery, but it was absolutely dry from 8th to 24th inclusive. R 48 per cent., and wet days 13 per cent., less than the average.—*Nenagh, Castle Lough.* On the whole fine, with cold nights and a cool atmosphere, but warm sun by day.—*Broadford, Hurdlestown.* Fine on the whole, with absolute drought from 10th to 24th. R ·73 in., and rainy days two, below the average of 12 years.—*Miltown Malbay.* Showery and cold to the 12th, followed by 12 days of dry, parching wind and clear, warm sunshine. This good weather changed on 25th, and rainy, cold weather prevailed to the end, intermixed with heavy H showers.

XXI. *Kilkenny, Sion Villa.* Fine and generally warm. R fell only on the first and last 7 days. Absolute drought from 8th to 24th inclusive. H on 3 days. Stormy and squally from 3rd to 5th. Gales on the last 3 days.—*Rathmines, Leinster Road.* Fine and dry, with much sunshine, but cold. Absolute drought for 17 days from 8th to 24th.

XXII. *Tuam, Gardenfield.* The first and last weeks were showery, the rest of the month was fine. R one-third below the average.—*Ballinamore, Lawderdale.* A fairly good month.

XXIII. *Belfast, Springfield.* May opened showery and cold, no R falling from 10th to 24th, but on 25th and 26th nearly ·75 in. fell, and the remainder of the month was showery.

JUNE.

I. *Muswell Hill.* R ·09 in., or 4 per cent., less than the average of 25 years. In the latter half R fell on all but four days.—*Finchley, Etchingham Park.* R ·84 in., or more than 48 per cent., above the average of 11 years, and the greatest in June since 1892. Only 4 rainy days in the first half.

II. *Abinger Hall.* Very fine and bright, with sufficient R to keep vegetation fresh.—*Wallington.* Warm and wet, with much cloud and a small amount of sun. The most sunless June since 1890. R ·35 in. above the average of 10 years. Duration of sunshine 170 hours, or 39 hours below the average.—*Birchington, Thor.* Very unsettled; some days very hot and bright, others with gales and fogs. There were no TSS, and everything was suffering for want of R.—*Lewes, Saxonbury.* Much cloud and fog. Warm with TSS, and heavy R at the end.—*Maidenhead, Castle Hill House.* A warm month, with one or two very hot days. R considerably above the average. Wind mostly N.W.

III. *St. Albans, The Grange.* Rather warm and humid.—*Bloxham Grove.*—Hot and moist, very favourable to vegetation.—*Northampton, Sedgebrook.* R ·44 in. above the average of 10 years.

IV. *Colchester, Lexden.* Generally cool and bright, but very hot on 14th and 24th.—*Ipswich, Bishops Hill.* Very unsettled weather, with great variations of temp. after the first week. R ·23 in. above the average.

V. *Bishops Cannings.* R 1·06 in. above the average. The R came just in time to give a good hay crop, but at the end of the month interfered with carrying.—*Tavistock, Rose Villa.* Rather warm, dry and fine, with large variations of temp., but the max. above 70° on 11 days.—*Wellington.* Some days very hot and sultry; while others were cold, windy and unsettled. R and temp. both rather above the average.

VI. *Ross, The Graig.* On the whole fine, with three days of heavy R and a good deal of high wind.

VII. *Hodsock Priory.* Very mild, especially at night; heavy showers at times, and some stormy weather in the third week. R ·65 in. above, mean temp. 2°·6 above, and duration of sunshine 22 hours below, the average.

VIII. *Astle Hall.* Very warm to the 15th, then cold with N.W. wind, and much R up to the 20th; then fine again and warm.—*Southport, Hesketh Park.* The cloudiest June on record, humid and somewhat wet. The very opposite of May in almost every respect.

Mean temp. 1° above average. Relative humidity abnormally high. Stormy W. to N.W. winds from 16th to 20th; light to moderate E. and variable airs before and afterwards. R an inch in excess of the average. The general water level rising decidedly. Sunshine less than the average by over 70 hours.—*Elswick Lodge.* R 5·61 in., the largest amount in June since the record commenced in 1872.—*Seathwaite Vicarage.* Rainy, and with fitful exceptions, temperature low.

X. *Ulpha Vicarage.* Cold and stormy, except during the last eight days, and odd warm days occasionally. An unusual amount of T and some heavy falls of R, the total being 3·91 in. above the average of 9 years. *Brampton, Denton House.* The R which fell in the first week saved the hay crop. Total 1·17 in. above the average.

XI. *Llanfrecha Grange.* A fine June but cold, though with some very hot days.—*Llanvihangel Court.* Great variations of temp.; cold spells followed by hot sun, and TSS in the mountains.—*Llandefaelog-fach.* With few exceptions the early part was dull and dark, high winds prevailing, but on Jubilee Day a bright warm period set in.—*Douglas, Victoria Road.* In every sense the worst, as well as the wettest, June in the 23 years recorded. Temp. persistently low and sunshine deficient.

XV. *New Kilpatrick, Chesters.*—Remarkably wet; total R 7·02 in., more than two inches falling between the evening of 15th and morning of 17th.—*Helensburgh, Victoria Road.* The wettest month of the year. R 6·69 in.—*Craigend Castle.* Cold and wet with very little sun, and floods on the low grounds caused by 2·12 in. of R on 15th.—*Oban, The Corran.* Excessive R, 1·99 in. more than the average of 10 years. Temp. slightly above the average.

XVI. *Coupar Angus Station.* Notwithstanding the cloudy and sunless days the temp. was well maintained, and comes out but a fraction of a degree below the average. The R is the heaviest in June for 20 years, being twice the average.—*Ballinluig.* Very favourable for agriculture; a good deal of R but generally warm.

XVIII. *Glenaladale.* Cold and stormy, vegetation very backward. Mean temp. 55°·5.—*Lochmaddy.* On the whole very fine settled weather.—*Drumnadrochit.* R 1·19 in. above the average, and only twice exceeded in 12 Junes. Frosts did damage in the early part, and the higher hills were repeatedly covered with S.

XIX. *Watten.* Dry, cold and generally cloudy, but some fine days.

XX. *Derry Castle.* The first six days were bright and fine, from 7th to 23rd was wet, then alternate bright and showery days to the

close. R 38 per cent., and rainy days 27 per cent., above the average. —*Broadford, Hurdlestown.* Very wet, R 2·00 in., and rainy days 7, above the average of 12 years.

XXI. *Templeudigan, Ballindoney.* A fair month, with some very hot weather, and a very severe TS on 12th.—*Kilkenny, Sion Villa.* Very warm and close for the first fortnight, followed by bitterly cold weather to the 18th, this was succeeded by lovely weather again to the close. Gales on 16th and 18th.—*Rathmines, Leinster Road.* Very changeable, but on the whole cold and wet; the last week warm and hazy.

XXII. *Tuam, Gardenfield.* The first week was very fine, the rest changeable. R nearly two-thirds more than the average.—*Lawderdale.* A very wet and unseasonable June.

XXIII. *Belfast, Springfield.* Grand weather from 3rd to 6th, inclusive. Cold as March on 16th and 17th, then showery and hazy to the end.—*Limavady, Drenagh.* Very wet; R 6·18 in. on 22 days.—*Stewartstown.* R above the average, injuring the crops.

JULY.

I. *Kensington, Edith Road.* Warm and very dry; R only one-fifth of the average.—*Muswell Hill.* R 1·51 in., or 55 per cent., less than the average of 25 years. Only ·01 in. fell in the first 18 days, while 1·05 in., or nearly seven-eighths of the total, fell in the 3 days 19th to 21st.—*Finchley, Etchingham Park.* Very dry; R 2·24 in., or nearly 75 per cent., less than the average of 11 years, and the smallest in July in that period. Only ·01 in. fell on the first 18 days.

II. *Chiddingfold.* Fine and hot. Mean temp. 64°·1; max. temp. 83° on 16th.—*Felbridge Place.* Remarkably dry; R only ·71 in.—*Abinger Hall.* Dry and very warm, and harvest began in real earnest. *Wallington.* Warm, very sunny and exceedingly dry; the R being only one-fourth of the average, and the smallest in 12 Julys. Duration of sunshine 240 hours; 50 hours more than the average, and exceeded only in July, 1887.—*Sandhurst Rectory.* Very dry; R 1·87 in. below, or little more than one-fourth of, the average of 20 years.—*Sheppey, Leysdown.* Very fine and dry; prevalent wind E., which moderated the temp. considerably. R 1·87 in. below the average of 10 years, and the smallest in July in that time. No near TSS.—*Crossness.* Remarkably fine and dry; no R from June 28th to July 21st, when there was a heavy TS with ·42 in. of R, out of the total of ·57 in. for the month.

—*Maidenhead, Castle Hill House.* Very warm, with some hot days; R below the average; wind mostly N.W. and S.W.

III. *St. Albans, The Grange.* Very warm, bright, and very dry. R only ·60 in.—*Blisworth, Grafton House.* Very dry and hot. R only ·13 in. —*Stamford, Easton.* The records at Easton began in 1867, and during the 30 years there has been no other July so dry as 1897, with ·16 in. of R on 4 days. The wettest was 1880, with 6·96 in. In 45 days ending August 3rd, only ·24 in. of R fell.—*Alconbury.* R only ·08 in.; far the smallest in July in 14 years, and little more than one-thirtieth of the average.

IV. *Alderton Rectory.* R fell on 3 days, ·01 in., ·10 in. and ·26 in.; total ·37 in.—*Ipswich, Bishops Hill.* Up to midnight on the 19th, no R had fallen since June 26th; but owing to the heavy TS on 21st, the total fall is ·85 in. more than the average.—*Rendlesham Hall.* Very hot and dry, with strong N. and N.E. winds.—*Sprowston, Oak Lodge.* The driest July for 60 years; R ·45 in.—*Hillington School.* A dry month; almost rainless from 1st to 18th.—*Blakeney.* Very dry; R only ·42 in., and none between 8th and 19th.

V. *Bishops Cannings.* R 1·56 in. below the average.—*Tavistock, Rose Villa.* Rather warm and dry; the temp. rising above 70° on 15 days, and above 80° on 2 days, Solar halos on 6 days.—*Wellington, The Avenue.* Comparatively dry, only about half the normal quantity of R falling. Strong winds for the time of year occurred on some days. Temp. above the normal, but showing a very large range.

VI. *Cirencester, Further Barton.* For the most part hot and dry, but colder for a few days after the 4th, temp. near the ground falling to 36° on the 8th.—*Cheltenham, Southam Villa.* Intensely hot, especially during the latter half.—*Ross, The Graig.* Warm and fine, the temp. reaching 80° on 6 days. Grass much burnt by the hot dry period for three weeks ending 18th, the showery weather later being very beneficial.—*Kenilworth, The Spring.* R 2·32 in. below, or little more than one-eighth of, the average of 11 years.—*Coventry, Priory Row.* The most beautiful July remembered, with a continuance of brilliant sunshine almost throughout. Although hot, the weather was not generally oppressive, and the evenings were perfect.

VII. *Nottingham, Carisbrook House.* R ·51 in. on 7 days, the smallest fall in any month in 4 years.—*Hodsock Priory.* Fine, with warm days and very little R, the total being 2·05 in. below, or less than one-fourth of, the average. Duration of sunshine 220 hours; an excess of 65 hours.

VIII. *Hoylake, The Chase, East.* R only ·62 in.; by far the smallest

fall in 10 years, and 1·85 in. less than the average.—*Bolton, The Park.* Remarkably bright and warm, with R 2·64 in. below the average, and the least recorded in July. Mean temp. 2°·2 above the average. Duration of sunshine 207 hours, or 64 hours above the average, and 13 hours more than in any previous July recorded.—*Southport, Hesketh Park.* Extremely sunny and unusually dry. Mean temp. 1°·7 above the average, notwithstanding stormy and rather cool weather during the first 10 days. Relative humidity abnormally low. Prevalence of moderate to light W. winds. R more than 2·25 in. below the average, and confined to few days. Underground water falling steadily, and brooks becoming almost dry. A very considerable amount of sunshine, and a correspondingly low amount of cloud.—*Seathwaite Vicarage.* Very variable temp., with a rather small R.

IX. *Goldsborough.* The driest July for 20 years. The first 10 days were dull and cold, but afterwards it was very hot.—*Beverley, East Riding Asylum.* Remarkably dry; R only ·23 in., or less than one-tenth of, the average of 7 years.—*Thixendale.* Cold up to the 8th. Absolute drought from 9th to 23rd inclusive.—*East Layton.* Very hot and dry, with some T towards the end. R much needed. Hay harvest finished; crops generally light.

X. *Pawston.* R quite abnormal; the first half, after a dripping June, being exceptionally dry, followed by an equally wet two days, with 2·85 in. of R, and then as dry again as ever.—*Ulpha Vicarage.* After the first 8 days, which were extremely cold and disagreeable, the weather was unusually fine and warm, but somewhat unsettled and dark from 20th to 28th, though no great amount of R fell. R 1·98 in below the average of 9 years.—*Brampton, Denton House.* Very growing weather for the first 8 days, then 11 days without R, which made a fine hay time.

XI. *Llanfrechfa Grange.* Unusually fine and hot. Heavy crops of hay well got in.—*Llandefaelog-fach.* The first half was exceptionally dry. Temp. generally high. Prevailing winds N.W. and N.E.—*Caergwrle.* R extremely small, only ·59 in. on 8 days.—*Rossett, Trevalyn Hall.* R only ·49 in.; the smallest fall in July in 30 years, and 2·19 in. less than the average. The nearest approach to it was ·52 in. in July, 1870.—*St. Asaph, Nantllys.* R only ·23 in.; the smallest fall with one exception in any month for 30 years, during which time only six months have had less than ·50 in.—*Colwyn Bay, Nant-y-Glyn.* The smallest R for July since observations began in 1880, viz., ·65 in. on 6 days. The total for May, June and July is also the lowest

during the same period, viz., 3·60 in. Everything is much burnt up, as the mean max. temp. in shade (70°·1) is also the highest recorded in 18 years.—*Douglas.* The first week was a continuation of the wet, cold and stormy weather of June, but after heavy R on the 8th, a welcome change occurred, and the rest of the month was, with slight exceptions, unusually fine and warm.

XII. *Maxwelton House.* Very dry and warm after the 9th, especially to 19th. R little more than half the average of 10 years, still there was enough for the crops.

XV. *Craigend Castle.* The first week wet and cold, then fine, though showery, and wet again at the end.—*Oban, The Corran.* A warm month with R ·89 in., and mean temp. 2°·1, above the average of 10 years.

XVI. *Dollar.* The first week was bad and cold, but the last three weeks were fine.—*Coupar Angus.* Noteworthy for the extremes of temp. R ·54 in. below, and mean temp. 1°·3 above, the average of 20 years.

XVIII. *Glenaladale.* The first week was cold, stormy and wet, followed by a spell of fine, dry and hot weather, succeeded by a wet, windy and cool week. Mean temp. 58°·6. *Lochmaddy.* A very fine July for the Hebrides.—*Drumnadrochit.* The middle of the month was very dry and scorching, but heavy R came on 22nd. Almost entire absence of T. R ·80 in. less than the average.

XIX. *Watten, H.R.S.* The first week was cloudy and cold, with some much needed R; the rest of the month bright, dry, mild and very fine.

XX. *Cork, Wellesley Terrace.* The first half was cool, the latter half warmer than the average; the mean temp. for the month being 1° above the average. R the smallest in July since 1889, and less than half the average.—*Derry Castle.* Dry generally till 22nd; only three really wet days during that period. Very wet from 23rd to 28th, and the closing days dry and very warm. R 24 per cent. below the average.—*Hurdlestown.* R ·02 in. above, and rainy days 6 below, the average of 12 years.

XXI. *Kilkenny, Sion Villa.* Very warm and sultry throughout. Storms during the first week, and a gale on 26th.—*Rathmines, Leinster Road.* The finest month of the year, and the driest July since 1887, but temp. not above the average.

XXII. *Tuam, Gardenfield.* The first 4 days were fine, also from 9th to 15th, and the last 2 days were very fine and warm; the rest of the month was changeable.—*Lawderdale.* Wet and unseasonable.

XXIII. *Belfast, Springfield.* July opened very fine, but from 4th

to 8th was showery and cold. From 9th till evening of 23rd only ·07 in. of R fell, the weather being bright and hot. A good month for farmers; all crops promising.

AUGUST.*

I. *Kensington, Edith Road.* First half warm and dry, the second cold and very wet.—*Muswell Hill.* Wet, both as regards amount of R and rainy days, the total being ·43 in., or 16 per cent., above the average of 25 years. The first 4 days were dry, while in the remainder of the month there were only 7 dry days, no two of which were consecutive.

II. *Abinger Hall.* The much needed R came in sufficient quantities in the latter part of the month to soak the soil, though too late to benefit some crops.—*Birchington, Thor.* The wettest month since March, everything having suffered from drought. S. and S.W. winds throughout. Duration of sunshine 245 hours.—*Sheppey, Leysdown.* Fine and hot during the first half, cooler and rainy during the rest of the month. No TSS, but distant T on 4 days.—*Lewes, Saxonbury.* The dry weather ended on 14th, and it was unsettled afterwards with a good deal of wind. Heavy storms of R, and T at times.—*Emsworth, Redlands.* Exceptionally rough weather throughout.

III. *Culham Vicarage.* Though R fell on 22 days, the month was fine and dry till the last few days; and the harvest was finished well. —*Oxford, St. Giles'.* R 1·53 in. above the average of 10 years, and falling on 22 days; but ·69 in. below that of August, 1891, when there were 23 rainy days.—*Fawsley.* Following a very dry July, 6·10 in. of R fell, the greatest in any month since observations began in 1879.—*Northampton, Sedgebrook.* Many squalls and much stormy weather, especially towards the end. R 2·92 in. above the average of 10 years.

IV. *Colchester, Lexden.* The first week was very hot and dry, the latter half cool and showery. Corn mostly well harvested.—*Ipswich, Bishops Hill.* Altogether fine, warm and bright, but frequent TSS and showers, heavy and short. R ·41 in. less than the average.—*Rendlesham Hall.* Fine and warm in the early part, but wet in the latter, with heavy S.W. to S. winds.

V. *Bishops Cannings.* Harvest work sadly interfered with by constant R, though it was very drying between the falls. R 2·32 in. above the average.—*Tavistock, Rose Villa.* Very wet; R fell every day from

* See also *Met. Mag.*, September 1897, p. 124.

5th to 31st, except 14th, the total being very nearly double the average. Solar halos were seen on 5 days. The continuous showers after the 5th interfered very much with the corn harvest.—*Ideford.* R 5·02 in., the greatest fall in August in 12 years.—*Long Ashton.* Total R 8 17 in., the greatest in August since 1871, and 4·47 in. above the average.

VI. *Further Barton.* Very wet after the 4th, with high temp. T was heard on 5 days, but the storms were distant.—*Ross, The Graig.* R much in excess of the average, the total having been exceeded in only six Augusts since 1858, while the number of rainy days (23) has been only once exceeded. The first week was exceptionally warm, the mean max. for the 8 days ending 5th, being 82°·0. Harvest was much hindered in the latter part.—*Coventry, Priory Row.*—Clear and hot weather prevailed till the 4th, and the ground was burnt up till the R of the 8th. There was much fine and generally warm weather, but the latter part was rainy and unsettled. No heavy TSS.

VII. *Hemingby.* The hot days at the commencement parched, rather than ripened, the grain, and this was followed by broken weather which brought everything to a standstill.—*Hodsock Priory.* Warm with some very hot days in the first week, the max. temp. being the highest since 1876. The latter part was showery. R ·27 in. below the average. Mean temp. 61°·5, or 2°·2 above the average. Duration of sunshine 201 hours, or 57 hours above the average.

VIII. *Astle Hall.* Very hot with TSS to the 12th, then R almost every day to the end.—*Bolton, The Park.* With the exception of the first five days the weather was changeable, with more or less R on each, except 9th and 25th. Mean temp. 1°·8 above, and R ·24 in. above, the average. Duration of sunshine 135 hours, or 26 hours more than the average.—*Southport, Hesketh Park.* A fairly normal month, but mean temp. 2°·2 above the average, owing to hot weather during the first 6 days, the max. in screen on 3rd being 85°·1, the highest recorded since August, 1884. Unusual prevalence of S. winds. Total R ·50 in. below the average, but rainy days more numerous than usual. Relative humidity remarkably low. A rather large amount of sunshine. TSS on 6 days.—*Seathwaite Vicarage.* Very wet. R mostly of a thundery character falling on 21 days out of the last 22. Temp. low.

IX. *Goldsborough.* The first week was very hot, the temp. rising above 80° on each of the first five days. The weather changed on 5th with T and R, and there were 20 wet days in the remainder of the month.—*Aysgarth Vicarage.* The first five days were very hot, but

afterwards it was cold with frequent R.—*East Layton.* Some very hot sunshine brought on the crops very quickly, in a way making amends for some very cold and bad weather previously.

X. *Duddon Valley, Ulpha.* The first 9 or 10 days were extremely hot, close and thundery, but much cooler, broken and showery weather prevailed afterwards.

XI. *Llanfrechfa Grange.* Unusually wet, with the most continuous S.W. wind recorded in any month. Grain harvest seriously interfered with. Distant T on several occasions.—*Llandefaelog-fach.* With the exception of the first week, which was very dry and hot, the month was wet and cold, and very unfavourable to harvest operations.—*Douglas, Victoria Road.* The fine summer weather which set in on July 10th lasted exactly a calendar month, but the remainder of August gave almost daily, but not heavy, R, with gales on 11 days.

XII. *Maxwelton House.*—Much continuous wet weather. Cutting oats began only on the 23rd, and was much delayed. R 2·62 in. above the average of 10 years.—*Riddell.* Very wet, with many heavy showers. The R is only ·57 in. above the average of 5 years, but the number of wet days is the largest on record.

XV. *Craigend Castle.* Very wet (R 8·77 in.) with severe TSS on 4th, 5th, 6th, and 11th, the heavy rains doing much damage.

XVI. *Dollar.* Cold and rainy almost throughout.—*Stronvar.* The R 11·93 in. exceeds the previous max. for the month by 2·50 in.—*Coupar Angus.* R ·78 in. above the average. Mean temp. 57°·7, or 2°·2 above the average. Both days and nights were warm, particularly the nights.—*Ballinluig.*—Very wet and unsettled.

XVIII. *Glenaladale.* A warm month, but rather wet. Very little wind. The first ten days sultry. Mean temp. 60°·0.—*Lochmaddy.* On the whole a very good month, but the last few days boisterous and very wet.—*Drumnadrochit.* R ·28 in. less than the average.

XIX. *Watten, H.R.S.* Mild and fine throughout.

XX. *Dunmanway, Coolkelure.* Disastrously wet and stormy. Quite impossible to save corn, and the potato crop seriously affected.—*Cork, Wellesley Terrace.* R 1·08 in. above the average. On 11 days the temp. was above, and on 20 days below, the mean. Mean temp. 0°·5 below the average.—*Killarney, Woodlawn.* R 7·95 in. on 28 days. Potatoes seriously damaged, and much hay rotting in the fields.—*Derry Castle.* The first five days were bright and fine, the remainder continuously wet, the constant R doing irreparable injury to meadows and cornfields. R 87 per cent., and rainy days 37 per cent., in excess of the average.—

Hurdlestown. R 1·62 in., and rainy days 6, above the average of 12 years. Very wet and much damage to crops of all kinds.

XXI. *Templeudigan, Ballindoney.* The first week was very hot, but after the 5th R fell on every day but three, and on some days very heavily. *Graigue, Brandondale.* R 7·37 in., 4·28 in. more than the average of 12 years, and ·67 in. more than in any other August.—*Kilkenny, Sion Villa.* Fine and warm during the first nine days, but heavy R at night on 5th and 7th; from the 10th to the end there was but one day without R. Storms between 19th and 31st, and gales on 17th and 19th.—*Rathmines, Leinster Road.* After a week of brilliant summer weather the remainder of the month was very wet.

XXII. *Tuam, Gardenfield.* Extremely wet, R three inches above, or nearly double, the average. The first four days were fine, the rest, except three or four, rainy, and the last six very rainy.—*Lawderdale.* Very wet and unseasonable.

XXIII. *Belfast, Springfield.* Though the total R exceeds the average of 22 years by nearly 3·50 in., it has been exceeded six times. Most crops suffered from too much moisture.—*Stewartstown.* R above the average, damaging the crops.

SEPTEMBER.

I. *Kensington, Edith Road.* Cold and rather wet, especially in the first half.—*Muswell Hill.* In the first 8 days 1·33 in. of R fell, then followed 8 dry days, while in the remaining fortnight small falls occurred on 6 days, and 1·32 in. in a TS on 29th. Total ·68 in., or 27 per cent., above the average.—*Finchley, Etchingham Park.* R 22 per cent. above the average. The first 8 days were wet, the next 8 were dry, and during the remaining fortnight R fell on eight days.

II. *Wallington.* Wet, cold and comparatively sunless. R 1·29 in. above, or nearly double, the average. Duration of sunshine 106 hours, or 54 hours less than the average.—*Sheppey, Leysdown.* On the whole fine, with many warm days, but R ·31 in. above the average of 10 years.—*Lewes, Saxonbury.* Very variable; the second week dry and cold; the first, third and fourth weeks showery, with high winds.—*Maidenhead, Castle Hill House.* The last half of the month was warmer than the first. R slightly above the average. Wind mostly N.W.

III. *St. Albans, The Grange.* Cold, wet and humid.—*Oxford, St. Giles'.* A very pleasant month, warm on the whole, and of average dryness until the 29th.—*Bloxham Grove.* The first week was wet and

gloomy, the rest of the month bright, warm and fine, excepting 29th, when heavy R fell.—*Northampton, Sedgebrook.* R ·44 in. less than the average.

IV. *Colchester, Lexden.* The first week cold, the latter part damp and mild.—*Ipswich, Bishops Hill.* Fine on the whole, but some rather extreme variations of temp. R ·71 in. above the average.—*Rendlesham Hall.* Heavy R on 17th, 18th, 19th and 29th, otherwise fine and warm.—*Hillington School.* Wet at the beginning and end, dry from 10th to 17th.

V. *Bishops Cannings.* R ·29 in. more than the average. Harvest finished by the 16th.—*Tavistock, Rose Villa.* A cold, wet month. Generally showery till the 9th and after the 15th, but no R was measured between. The temp. rose to 70° on only 2 days. Solar halos on 4 days, fog on 5 days.—*Wellington, Sunnyside.* Stormy to the 8th, succeeded by a week of fine weather. The next few days were unsettled, followed by a fine, warm week, and the last few days were again unsettled. R about ·50 in. above the average.

VI. *Ross, The Graig.* The wet weather which prevailed throughout August terminated on 8th, having lasted five weeks. The month was fine afterwards, except a night's R on 24th and heavy R on 29th. Much pleasant weather between the 9th and 29th. Mean temp. nearly 2°·0 below the average.—*Coventry, Priory Row.* Fine on the whole, with much sunshine and equable temp.

VII. *Hodsock Priory.* A cool but otherwise normal month. After some R on the first few days, dry weather set in, which enabled the harvest to be completed. R ·08 in. above the average. Duration of sunshine 115 hours, or 4 hours less than the average.

VIII. *Astle Hall.* Very wet till the 6th ; slight frost on 10th, 11th and 12th, though not enough to check vegetation ; hot again from 23rd to the end.—*Bolton, The Park.* Very wet until the 6th, nearly three inches of R falling during the first five days ; the weather was then fine and settled until the 16th, the remainder of the month was fair with occasional showers, but heavy R on 28th and 29th. R 1·10 in. above, and mean temp. 1°·5 below, the average. Duration of sunshine 93 hours, or 6 hours above the average.—*Southport, Hesketh Park.* Normal in all respects but two. Mean temp. 1°·5 below the average. Frost on grass on one night only. Absolute max. in screen the lowest September value in 27 years, and mean daily range of temp. very small. A prevalence of W. and N. winds. No less than three inches of R during the first week, but little subsequently, the total

only exceeding the average by half-an-inch. Normal amounts of cloud and sunshine.—*Seathwaite Vicarage.* Rather rainy, with temp. generally below the average.

IX. *Goldsborough Hall.* More than two-thirds of the total R fell in the first 7 days (which were very wet), followed by 6 rainless days; in the second half R fell on 6 days.—*Aysgarth Vicarage.* A fine month, but not warm. Max. temp. 65°.

X. *Duddon Valley, Ulpha.* The early part was wet, followed by some very fine days intermingled with a showery day or two. From 20th to 24th was very stormy, and the latter part fine and dry, with the exception of heavy R on the 29th.—*Brampton, Denton House.* The first six days were wet and bad for harvest, but afterwards the weather settled, and the corn was stored in good condition.

XI. *Llanvihangel Court.* Warm at the beginning and end, cooler, with N. winds, in the middle.—*Llandefaelog-fach.* On the whole wet and cold, with some heavy H showers and frosty nights, but a few warm and bright days.—*Douglas, Victoria Road.* Torrential R during the first four days (4·35 in.) accompanied by strong W. gales. Fine, cool, drying weather from 6th to 22nd. Violent gales again from 21st to 27th, while the remaining three days were fine and warm.

XII. *Maxwelton House.* A wet week from 1st to 6th, followed by a very fine fortnight, which allowed oats to be harvested in excellent condition.—*Riddell.* Heavy R in the first week, just as farmers were beginning to cut their corn, put the harvest back for 10 days, but the crops were well saved, for though there was some R later, the winds were drying.

XVI. *Coupar Angus.* During the second and third weeks the weather was very desirable, but R fell on 16 days, and the total is ·66 in. below the average. There were no gales or floods. Mean temp. 1°·7 below the average.—*Ballinluig.* A great improvement on the weather of August, for, though showery, the harvest was secured in good condition.

XVIII. *Drumnadrochit.* The heaviest R in 12 Septembers; the fall being 1·68 in. above the average. Besides being wet, the month was unusually cold.

XIX. *Watten, H.R.S.* Clear, mild and fine; a good harvest month.

XX. *Cork, Wellesley Terrace.* R ·61 in. below the average. Mean temp. 3°·2 below the average.—*Killarney.* Down to the 8th, the crops were threatened by much R, but the anti-cyclone which followed enabled the harvest to be saved.—*Derry Castle.* The first week very wet,

generally dry from 9th to 23rd, and splendid weather for harvesting. Showery from 23rd to the close. R 10 per cent. above the average.—*Hurdlestown.* R ·17 in. above, and rainy days 1 below, the average of 12 years.—*Miltown Malbay.* Only one week of dry, summer weather, followed by a threatening week with occasional showers. The remainder was wet.

XXI. *Kilkenny, Sion Villa.* The first week was wet and cold, but from the 8th a spell of fine weather set in which continued to the end. Morning fogs from 11th to 15th.—*Rathmines, Leinster Road.* Rather cold, but on the whole an average month ; warmer at the end.

XXII. *Tuam, Gardenfield.* A rather fine month ; fine from 9th to 16th, the rest changeable. R more than two-fifths under the average. —*Lawderdale.* A cold, unseasonable month.

XXIII. *Belfast, Springfield.* After the first six days the amount of R was not sufficient to hinder the gathering of the crops, which were all fairly good.

OCTOBER.*

I. *Kensington, Edith Road.* Singularly calm, warm and very dry. Far the driest October in 14 years. R less than a quarter of the average.—*Muswell Hill.* The driest October in the 26 years recorded, but the total R is only ·03 in. less than that of October, 1879. Though R fell on 12 days the amounts were extremely small, and the total is less than a quarter of the average.—*Finchley, Etchingham Park.* The driest October since the gauge was started in 1885, the R being little less than half of that of the previous driest. R fell on only 9 days, and the total, ·69 in., is 2·41 in. less than the average. On only two days did the fall exceed ·10 in.

II. *Felbridge Place.* Remarkable for exceedingly small R, only ·40 in.—*Abinger Hall.* The finest October remembered ; some days quite summerlike.—*Wallington.* The driest October in 12 years. R 2·73 in. below, or little more than one-sixth of, the average. Mean temp. 2°·3 above the average. Duration of sunshine 105 hours, an excess of 4 hours.—*Sandhurst Rectory.* The driest October recorded ; R only ·20 in., or 3·70 in. below the average of 20 years.—*Tunbridge Wells, Camden Park.* R ·32 in., the least fall in 14 years, and less than one-twelfth of the average.—*Tunbridge, Beech Hurst.* The driest October since 1875. R only ·26 in.—*Birchington, Thor.* Remarkably fine and

* See also *Met. Mag.*, November 1897, p. 149 ; and December 1897, p. 169.

warm, and the driest October on record. Duration of sunshine 161 hours.—*Chislehurst, Southlaund.* The smallest October R (·44 in.) in 18 years, the next smallest being 1883 and 1884, in each of which 1·01 in. fell.—*Chichester, Westgate.* R only ·50 in., less than one-fifth of the average of 66 years, during which time only one other October has had less than an inch—viz., ·92 in. in 1879.—*Chichester, Eartham House.* Abnormally dry; R only ·45 in.—*Lewes, Saxonbury.* Fine and dry, chiefly bright sunny days. No R during daylight, and only a few slight showers in the night or early morning. Total R ·22 in. Partial drought from September 30th to November 14th.—*Uckfield.* Total R only ·38 in., which is less than a tenth of the average for 54 years, and the smallest in that period.—*Maresfield, Forest Lodge.* The driest October recorded in 42 years. R 3·57 in. below, or less than one-eighth of, the average.—*Crowborough Observatory.* R only 36 ·in., which is less than a ninth of the average for 26 years, and a deficiency of water supply became apparent. There have been several Octobers in which the temp. has been higher.—*Osborne.* R ·48 in., the least recorded in October in 40 years.—*Hartley Wintney.* The driest October recorded here, the R being less than a quarter of the average. Light S.W. winds and absence of gales were the chief features.—*Maidenhead, Castle Hill House.* Very muggy weather, with R slightly below the average. Wind mostly N.E. or N.W.

III. *St. Albans, The Grange.* Warm and very dry. R only ·86 in.—*Culham Vicarage.* Very fine, with hardly any frost, and the temp. generally high.—*Oxford, St. Giles'.* On the whole very charming, fine, warm and dry.—*Northampton, Sedgebrook.* Mostly fine and dry. R 1·67 in. below, or less than half, the average.

IV. *Colchester, Lexden.* Dry, with many bright days, little wind, and only slight frosts. Frequent thick mist in early morning.—*Ipswich, Bishops Hill.* R 2·35 in. below, or only one-sixth of, the average, and the smallest in 26 Octobers. A very fine month with a large amount of sunshine; much wet fog in the mornings in the latter half. A few slight frosts.—*Rendlesham Hall.* The most beautiful October remembered; sunny and warm.—*Geldeston.* R only ·76 in., the smallest fall in October since 1866.—*Sprowston, Oak Lodge.* The driest October for 60 years, with the exception of 1861 and 1866. R ·91 in.—*Blakeney.* A dry month; no R between the 19th and 30th.

V. *West Dean.* Remarkably fine; cold in the first half, and very warm in the second. Nearly all the R fell at night.—*Bishops Cannings.* Beautiful weather for the last ten days. R 1·46 in. below, or little

more than half, the average.—*Tavistock, Rose Villa.* Dry and rather warm with no R in the 10 days from 19th to 28th. The temp. rose above 60° on 11 days, and on two days did not fall so low as 54°.—*Wellington, The Avenue.* Very fine and dry, and the last fortnight unusually warm and quiet. Stormy from S. from 15th to 17th. R very deficient, and temp. above the average.—*Cothelstone House.* R 1·05 in.; the lowest on record for October.

VI. *Clifton, Pembroke Road.* R 1·22 in. The driest October in 40 years, with the exception of 1888, 1·07 in., and 1884, 1·22 in.—*Cirencester, Further Barton.* Remarkably fine; frost only on 6th and 7th. More than ·60 in. of R fell on 15th and 18th, after which the weather was again dry and serene, with high temp. and very little fog. —*Gloucester, Birdlip Hill.* Exceptionally fine and sunny. Drought from the 20th to November 6th. Hardly any autumn frosts, and none severe.—*Cheltenham, Southam Villa.* A very beautiful month, especially towards the close. There was only one wet day (15th), the R falling generally at night.—*Ross, The Graig.* Very dry, except for heavy local showers on 2nd, 13th, 15th, 17th and 18th. Almost all the R fell at night, and the number of fine enjoyable days was very large. Nasturtiums and dahlias almost uninjured at the close. R 61 per cent. of the average of 38 years. Mean temp. 1°·3 above the average.—*Coventry.* A very lovely month, with many days of mild, calm sunshine.

VII. *Hemingby.* Mostly very pleasant, with some delicious days towards the end.—*Hodsock Priory.* R little more than one-third of the average, and with two exceptions the least in October in 22 years. Duration of sunshine 92 hours, or 7 hours more than the average.—*Glossop Hall.* R the smallest in October for at least 7 years.

VIII. *Bolton, The Park.* Excepting from 12th to 14th, the month was unusually mild, with slight rainfall, high mean temp., and a fair amount of sunshine. Absolute drought prevailed from the 18th to the end. Mean temp. 2°·9 above the average, and the highest since 1886. Duration of bright sunshine 64 hours, or 4 hours above average. R 1·58 in. below average.—*Southport, Hesketh Park.* On the whole warm, dry and fine. Mean temp. 2°·2 above the average. Frost on grass on 4 nights. An overwhelming prevalence of light S.E. winds. R the smallest in October since 1879, and more than 2·00 in. below the average, practically none falling after the 17th. Less cloud and more sunshine than usual.—*Hawkshead, Esthwaite Lodge.* The mean temp. (49°·0) though high, conveys no adequate idea of the splendid amount

of sunshine enjoyed for the last 14 days, as cold nights kept the temp. down. The mean max. of that period is 7°·8 above the average for ten Octobers. Absolute drought prevailed during the last 14 days.—*Seathwaite Vicarage.* The first half rainy, but a spell of exceptionally bright summerlike weather throughout the last fortnight.

IX. *Goldsborough Hall.* On the whole very fine and open, with little frost and not much R. Very fine from 15th to 26th, but fogs every day afterwards.—*East Layton Hall.* Very dry and extremely mild. No wind and no wet, but a few dense fogs. Springs very low.

X. *Pawston.* Practically all the R fell in about 24 hours on 14th and 15th, for although there were 13 other rainy days, on only one did the fall exceed ·05 in. Total R less than half the average.—*Ulpha.* Broken and showery weather up to the 18th, but the remainder splendid, with frequent slight frosts.—*Brampton, Denton House.* Exceptionally fine and dry. R little over half the average.

XI. *Llanfrechfa Grange.* Unusually little R. Very mild and calm after the 15th. Sharp frost from 6th to 8th, and on 13th.—*Llanvihangel Court.* Wonderfully fine and warm, except from 13th to 18th. Fogs on the last few mornings. Only ·01 in. of R in the last 13 days.—*Llandefaelog-fach.* Lovely autumn weather throughout, especially the last ten days.—*Douglas, Victoria Road.* The first 17 days were milder than the normal, but dull and wet. The remainder were bright, dry, calm and warm, and gardens were full of flowers.

XII. *Maxwelton House.* A dry month, excepting the four days 14th to 17th in which 2·44 in. of R fell. The last fortnight was dry, fine and warm, and some days summerlike.—*Lilliesleaf, Riddell.* Very warm, with the exception of four cold days from 11th to 14th; and very dry, with the exception of four wet days from 14th to 17th. From the 18th to the end surprisingly warm and fine.

XIV. *Girvan, Pinmore.* Exceptionally dry and warm. R 2·39 in. below, or little more than half, the average. Mean temp. 3°·2 above the average.

XV. *Craigend Castle.* The first half mild but showery; the second half fine and clear, with fogs at night.

XVI. *Dollar.* Beautiful all through; very unusual for October.—*Coupar Angus.* Mean temp. 2°·4 above, and R ·90 in. below, the average.

XVIII. *Glenaladale.* Exceptionally beautiful, calm and warm. A cold spell occurred about the 13th, but the shade temp. did not once fall to 32°.—*Skye, Strathaird.* Exceptionally dry, and resembling summer rather than autumn.—*Lochmaddy.* Normal weather till the

18th, but from 19th to 31st the finest possible for the time of year.—*Drumnadrochit.* R less than half the average of 11 Octobers, and the least in that time. Delightful weather from the 19th to the end.

XIX. *Watten, H.R.S.* The first half was cloudy, wet and boisterous; the latter dry, mild and fine, with some fog and slight frosts at night.

XX. *Coolkelure.* Exceptionally mild throughout, not a single frost. Myrtles covered with a second bloom at the end. Wind almost entirely S.E.—*Killarney.* Not only was the month (with the exception of 13th to 16th when 4·00 in. of R fell) extremely dry, but there was no frost, and dahlias, heliotropes and nasturtiums were in full flower at the close.—*Derry Castle.* Favourable on the whole, and splendid weather from the 18th to the close. R 13 per cent., and rainy days 16 per cent., below the average.—*Ballingarry, Hazelfort.* A beautiful month, without frost.—*Hurdlestown.* R ·05 in. above, and rainy days two below, the average for 13 years. Potato crop the worst since 1879.—*Miltown Malbay.* First half very rainy; the last fortnight fine and dry, with cloudless skies and high temp.

XXI. *Templeudigan, Ballindoney.* R very heavy between the 13th and 17th; otherwise fairly fine.—*Kilkenny, Sion Villa.* Fine and mild to 10th, followed by a stormy week, winding up on 17th with a strong S.W. gale. Fogs from 19th to 22nd, thence to the end fine and mild. —*Rathmines, Leinster Road.* Fine, dry and warm, though usually the most unsettled month of the year.

XXII. *Tuam, Gardenfield.* R on 15 days, the rest dry. Very fine from 18th to 28th. R one-sixth under the average. Frost on 2 nights. —*Lawderdale* The first half very wet; the second dry and cold.

XXIII. *Belfast, Springfield.* Not much R except from 14th to 16th. Lovely weather, often like summer, from 18th to 29th.—*Carrablagh.* R 2·68 in. on 13 days; little more than half the average of ten years.

NOVEMBER.*

I. *Kensington, Edith Road.* Warm and very dry. The driest November in 14 years, excepting 1889.—*Muswell Hill.* The driest November since 1879, when ·72 in. fell; the total (1·05 in.) being only 38 per cent. of the average of 25 years.—*Finchley, Etchingham Park.* The driest November since 1889, the total R being only 43 per cent. of the

* See also *Met. Mag.*, December 1897, pp. 168 and 169.

average. On 8 days out of the 13 on which R fell, the amount did not exceed ·05 in.

II. *Haslemere, Hazelhurst.* The mildness of the season is well illustrated by the fact on the 21st there were 109 different plants in flower in the garden.—*Wallington.* Warm and very dry, but the most cloudy November in 12 years. R less than half the average. Duration of sunshine 37 hours, or 14 hours less than the average.—*Sheppey, Leysdown.* Exceptionally dry and mild during the greater part, and marked by absence of gales till the 28th. R ·96 in. below the average of 10 years.—*Lewes, Saxonbury.* The dry weather finally ended on 24th, and the first frost of the season occurred on 26th. Hunting was stopped in the first fortnight for want of R, and many wells were dry. —*Hartley Wintney.* Frequent fogs from 1st to 26th, with light S.W. winds ; gales on 28th and 30th. R the smallest in 10 years, and less than half the average.—*Maidenhead, Castle Hill House.* Very muggy, with R below the average. Wind mostly N.E. or N.W.

III. *St. Albans, The Grange.* Rather warm, very humid and cloudy. R only ·95 in.—*Slough, Upton.* Exceptionally fine, with frosts on only 5 days, but thick mists in the middle of the month. Ground beneath the surface very dry, and the Thames very low on many days.— *Culham Vicarage.* A dry, mild month, with no frost.—*Pyrton Manor.* R 1·87 in. below, or less than one-third of, the average for 12 years.— *Oxford, St. Giles'.* Mild and dry, the R just half the average of 10 years. Fog on 10 days, sometimes very thick.—*Northampton, Sedgebrook.* R 1·36 in. below, or less than half, the average.

IV. *Colchester, Lexden.* Calm and generally settled weather, with little frost, but often misty.—*Ipswich, Bishops Hill.* R 1·28 in. below, or considerably less than half, the average ; only one-third of the total falling up to the 27th. Many thick, wet fogs occurred in the 10 days ending 27th.—*Rendlesham Hall.* Very fine and dry up to the last week, then rainy, with heavy N.N.W. gale on 28th and 29th, causing a very high tide and flooding.—*Denver.* Very mild, but with extraordinary and sudden variations of temp.

V. *Bishops Cannings.* R slightly less than one-third of the average, and falling on only 11 days.—*Tavistock, Rose Villa.* Dry and warm, the temp. rose above 60° on 3 days, and the first frost of the season occurred on 4th.—*Wellington, The Avenue.* Generally mild, dry and quiet, but great changes of temp. occurred at short intervals. The last 5 days were rough and stormy. R about half the normal and temp. considerably above the average.

VI. *Further Barton.* Very changeable, with great variations of temp., but only one frost sufficiently sharp to injure vegetation. Much fog, but some days exceptionally fine.—*Ross, The Graig.* Extremely cloudy, but much fine weather. Very wet from 12th to 14th. Frost on 19th and 20th, and subsequent fogs for about a week, finished the tender flowers which had lasted unusually late. R about 65 per cent. of the average. Only a few flakes of S.—*Coventry, Priory Row.* For the most part very fine and dry with mild temp. Some spring flowers coming into bloom.

VII. *Bucknall.* Fog, calmness and high bar. were the chief characteristics till the 25th, after which there was much R, and a terrific gale from N. early on 29th.—*Hemingby.* Pleasant on the whole, but broken weather at the end.—*Hodsock Priory.* Mild and very dull. Dry till the last few days, which were stormy. Average R. Duration of sunshine 30 hours, or 16 hours less than the average.

VIII. *Bolton, The Park.* R ·88 in. above the average. Mean temp. 4°·8 above the average, and nearly 2° above the previous highest. The first shade frost of the season occurred on 30th. Duration of sunshine 20 hours, or 6 hours less than the average.—*Ulverston, Urswick.* Though R was measured on only 14 days, the amount was 7·00 in. From November 11th to January 6th, 1898 (8 weeks), 16·40 in. of R fell, being four times the average fall per month. This district, though not very low-lying, was becoming flooded.

IX. *Goldsborough Hall.* Very mild and open, with some bright, warm days; the temp. rising above 50° on 11 occasions.

X. *Ulpha School.* Very mild and fine in the early part, followed by tremendous rains from 11th to 17th, 7·85 in. falling in the 7 days. The next seven days were again fine and mild, and the month closed with cold R and showers of H and S.—*Brampton, Denton House.* The early part was dry and fine, but from the 11th to the end was wet.

XI. *Llanfrechfa Grange.* Fine and very favourable for agriculture. Very warm from 12th to 14th.—*Llandefaelog-fach.* Thick fogs were prevalent, and the month generally was dark and dull. More than half the R fell in the last 6 days.—*Rosset, Trevalyn Hall.* Up to the 12th the verified min. in Stevenson's screen had not once fallen to 32°, and summer plants and flowers retained their life and colour. The 30 years' observations show no previous instance of immunity from frost to so late a date.—*Douglas, Victoria Road.* A beautiful month, though 5·99 in. of R was recorded, mainly from heavy falls at night. Temp. high throughout, with many lovely days. Gales occurred on only 5

days, but there was a good deal of mist. Gardens bright with summer flowers until a frost occurred on 15th.

XII. *Riddell.* Unusually warm and slightly foggy occasionally. Little or no frost. Very favourable for the work of the season.

XV. *Craigend Castle.* Mild, stormy and wet, with strong gales at the close.

XVI. *Coupar Angus.* High night temp. and dense fogs prevailed for the first three weeks, but the close of the month was fitful and stormy. R ·59 in. below the average. Mean temp. the highest in 20 years.—*Ballinluig.* Sunless and warm till the 15th, followed by slight frosts on three days; then warm again till 22nd, and afterwards changeable and cooler. S on the high hills on 29th and 30th.—*Montrose, Melville Gardens.* Damp and foggy, with no S or frost.

XVIII. *Glenaladale.* A very fine winter month, but the weather towards the end became very stormy, with cold R, sleet, H, T and L, and S on the hills.—*Lochmaddy.* The first seven days were remarkably good, but the remainder, average November weather.—*Drumnadrochit.* R ·05 in. more than the average of 11 years.

XIX. *Watten.* Dry, fine and mild; but stormy, with R at the end.

XX. *Dunmanway, Coolkelure.* Myrtle bushes in the open air were covered with a second bloom.—*Killarney.* The first half mild, with several summer plants in flower a second time.—*Derry Castle.* The first week fine and bright, and the third week also very fine. Heavy R from 7th to 17th, and again from 24th to 30th; the last week being also stormy and cold. R (8·24 in.) 75 per cent above the average, and the greatest on record for November, the nearest being 8·12 in. in 1887. —*Hurdlestown.* The wettest November on record here, the R being 2·38 in. above the average for 13 years, but the number of rainy days is 5 less than the average for the same time.—*Miltown Malbay.* Though much R fell (6·53 in.), the month was unusually calm with high temp. up to the 27th, when winter was ushered in by a gale.

XXI. *Templeudigan, Ballindoney.* Very wet and very mild, with several heavy falls of R.—*Kilkenny, Sion Villa.* A decidedly damp month. The R (5·25 in.) nearly all fell during 11 days. Storms on 12th and 30th, and gales on 14th, 28th and 29th. Very gloomy.— *Rathmines, Leinster Road.* Very mild and wet; mean temp. 46°·4, the highest since 1881.

XXII. *Tuam, Gardenfield.* R fell on 17 days, and was slightly less than the average. The first 7 days, and from 18th to 23rd, were very fine. Frost on 2 nights.—*Lawderdale.* The first and third weeks were fine and dry, but the rest of the month was very wet and cold.

XXIII. *Belfast, Springfield.* With the exception of the 28th, which was cold, wet and stormy, no fault could be found with the weather.

DECEMBER.

I. *Finchley, Etchingham Park.* R 17 per cent. above the average of 11 years. The first half of the month was the wetter, R falling on 11 out of the first 15 days.

II. *Wallington.* Warm, wet and unhealthy. An entire absence of S and very little frost. R 1·07 in., or 50 per cent., above the average of 10 years. Mean temp. 3°·0 above average. Duration of sunshine 44 hours, an excess of 5 hours.—*Birchington, Thor.* Very changeable. Sharp frost from 3rd to 10th; mild from 12th to 21st; frost again from 21st to 27th; then very mild to the end.—*Leysdown.* Mild and damp, with great prevalence of strong winds, gales and squalls, but a few remarkably fine, warm days.—*Lewes, Saxonbury.* Mild on the whole, with gales on 10th, 11th, 29th and 30th. Bright, sunny days and white frosts from 20th to 25th.—*Maidenhead, Castle Hill House.* Very muggy, with R considerably above the average. Wind mostly S.W. or N.W.

III. *Southgate, The Lawns.* Damp fogs more than usually prevalent. —*Culham Vicarage.* Wet and mild in the first half, and at the end; sharp frost in the third week.—*Oxford, St. Giles'.* The variations of temp. were considerable, and there was much fog, but a good deal of sunshine, the 24th, 25th and 26th being lovely days.—*Pitsford, Sedgebrook.* R ·27 in. above the average. Mean temp. 38°·6.

IV. *Colchester, Lexden.* Generally open and unsettled, with a cold period from 20th to 26th.—*Ipswich, Bishops Hill.* R ·07 in. less than the average. Much wet fog, but mild, with a few frosts. The second week very unsettled and windy.—*Denver.* Remarkably mild. Strawberries gathered on 22nd; roses picked on 31st.

V. *Bishops Cannings.* R 50 per cent. above the average. Springs still low at the close.—*Wellington.* Excessively wet, rough and unsettled, with frequent gales and heavy downpours of R, more than an inch falling on 7th and 29th. Frequent fogs and little sunshine. Temp. above the average, but sharp frost for a few days before Christmas.

VI. *Clifton, Pembroke Road.* Very rough and stormy from 7th to 16th, then fine and frosty till 26th, followed by gales and R to the close. —*Further Barton.* Wild and stormy, with frequent gales from S.W.;

after the 21st, a few fine days, with hard frost.—*Ross, The Graig.* After two dry months, December had an excess of R, and the Wye was twice in high flood. The 10 days 17th to 26th were very fine, and the rime on trees was beautiful in clear sunshine. Not more cloud and fog than usual. Temp. above 50° on 10 days.—*Coventry, Priory Row.* For the most part mild, damp and stormy, but very fine and frosty at Christmas.

VII. *Worksop, Hodsock Priory.* Mild, with very little frost and no S. R normal. Mean temp. 2°·6 above average. Duration of sunshine 24 hours, or 9 hours less than the average.

VIII. *Astle Hall.* Very wet up to the 16th, after that more or less frosty. The ice on the ponds bearing on 26th.—*Bolton, The Park.* The first three weeks and the last four days were mild and showery, but frost prevailed for a few days between. R ·65 in., and mean temp. 2°·7, above the average. Duration of sunshine about one hour above the average.—*Southport, Hesketh Park.* Another warm month; S.E. and S. winds greatly predominating. Mean temp. 2°·7 above the average. Frost in screen on 6 days and on grass on 13 days. Max. temp. (57°·9 on 17th) the highest value in December since the Observatory was established in 1871. Absolute min. also unusually high. R normal, the great bulk of the fall occurring in the earlier half of the month. Underground water high, and much low-lying land flooded during the first fortnight. A satisfactory amount of sunshine. Ice upon the large lake in Hesketh Park on 9 days, the greatest thickness being 2·0 in. on 26th.—*Seathwaite Vicarage.* Wet and very mild. No S, and only 5 days' sharp frost in the week before Christmas.

IX. *Aysgarth Vicarage.* Decidedly wet, except from 18th to 26th, when the weather was lovely.

X. *Brampton, Denton House.* The early part was very wet and mild. R ·77 in. above the average.

XI. *Dowlais, Gwernllwyn.* R 13·34 in., the greatest monthly total in the 11 years recorded. On 6 days the R exceeded an inch, and on 29th three inches.—*Llandefaelog-fach.* Very wet and stormy (R 10·13 in.); the first month with more than 10 inches of R in 19 years. Very hard frost from 20th to 25th.—*Douglas, Victoria Road.* Very mild, wet and unusually stormy; gales, many of great violence, occurred on no fewer than 15 days.

XII. *Dalbeattie, Richorn.* Out of the 8·28 in. of R, 5·16 in. fell in the last 6 days.—*Dumfries, Ivy Bank.* R 8·39 in., including two falls of more than an inch in the last week, during which time the river

was in heavy flood. Depth at gauge 9 ft. on 27th, and 11 ft. on 29th. —*Maxwelton House.* Fine, with white frosts, for the first three days; showery and mild from 4th to 15th; fine, bright and cold from 16th to 20th, and hard frost from 21st to 24th; mild and stormy, with much heavy R and floods, from 25th to the end.—*Moffat, Craigielands.* A record-breaking R (12·27 in.). In the weeks ending 13th and 27th, 2·27 in. and 2·05 in. fell respectively, and in the last 4 days 4·87 in.

XV. *Craigend Castle.* The first half, and the last week, were stormy and wet, but frost and fog prevailed from 16th to 23rd.—*Oban, The Corran.* Wet, dark and dull, with R ·92 in. in excess of the average.

XVI. *Coupar Angus.* The third month in succession with temp. above the average. R ·40 in. above the average.—*Montrose, Melville Gardens.* Damp and foggy, and practically devoid of S or frost.

XVIII. *Lochmaddy.* Very boisterous weather, except from 17th to 25th.—*Drumnadrochit.* R very heavy, 2·43 in., or 72 per cent., above the average for 11 years.

XX. *Coolkelure.* Remarkable for the frequency and violence of the gales, accompanied by much R and abnormally high temp.; not a day's frost. S.E. winds for the first three weeks, S.W. in the last week.—*Cork, Wellesley Terrace.* Humid, with much damp fog. R ·30 in., and temp. 1°·7, above the average.—*Derry Castle.* Stormy and very wet and unusually mild. R 28 per cent. above, but rainy days 5 per cent. below, the average.—*Broadford, Hurdlestown.* A wet month; R ·47 in. above the average for 13 years.—*Miltown Malbay.* Very rainy, very stormy, and very inclement. In five consecutive days in the last week 4·28 in. of R fell.

XXI. *Templeudigan, Ballindoney.* Another very wet month, there being only 8 fine days. Very mild for the time of year.—*Kilkenny, Sion Villa.* Curious changes of weather occurred. Frost on 2nd, 3rd and 12th; very mild from 4th to 6th, and from 17th to 25th. Sleet and H on 8th, 14th, 15th and 30th. One loud peal of T and very vivid flash of L on 30th about 1.30 p.m. Thick morning fogs from 3rd to 6th. Gales on 8th, 9th and 16th, and most severe from 26th to 31st inclusive.—*Rathmines; Leinster Road.*—Fairly dry, with temp. much above the average. Severe gales in the last week.

XXII. *Tuam, Gardenfield.* Very wet; R nearly 50 per cent. above the average. Fine on 2nd, and from 19th to 25th very fine; R on the other days. Frosts on about 8 nights, but no S.

OBSERVERS' NOTES ON THE YEAR 1897.

ENGLAND.

DIVISION I.—MIDDLESEX.

ACTON, NEWBURGH ROAD.—R 1·07 in. above the average of 7 years.

KENSINGTON, EDITH ROAD.—A warm year. Mean temp. 1°·3 above the average. Similar to 1896 in mean temp., R, and number of rainy days; the two latter almost exactly the average. The fall of the first quarter was the largest recorded in 14 years, and that of the last quarter the least, excepting 1890. In spite of dry periods in May, July and October, no absolute or partial drought occurred.

MUSWELL HILL.—The total R is 1·59 in., or about 6 per cent., below the 25 years' average, while the number of rainy days is 8 above the average. There were seven months with an excess, amounting to 4·68 in.; of these, March was just over double its average, while February was 70 per cent. in excess; there were five months with a deficiency, amounting to 6·27 in.; that of June was trifling, only 4 per cent.; but the deficiencies of July, October, and November were large, being 55 per cent. in July, 76 per cent. in October, and 62 per cent. in November. There was no absolute drought, but there were two periods—the first of 20 days, May 6th to 25th, the second of 19 days, June 30th to July 18th—during each of which only ·01 in. fell. There was only one fall of more than an inch in 24 hours, 1·32 in. on September 29th.

FINCHLEY, ETCHINGHAM PARK.—The R varied very little, either in amount or in number of days, from the 11 years' average. The total is ·46 in., or nearly 2 per cent., below the average, and the number of rainy days 2 less than the average. The totals of the first four months were all above the average; that of March being as much as 93 per cent. in excess. June, September and December were also in excess; but May, July, August, October and November were below the average. The two months showing the greatest deficiency

were July and October, each of which had about one-quarter of its average, these being, as a rule, the two wettest months of the year. No absolute drought occurred, but there were two dry periods each of 20 days—May 6th to 25th, with only ·02 in. on 11th; and June 29th to July 18th, with ·01 in. on July 6th. There was a marked absence of S; it was recorded on 7 days only, six in January, and one in February. There were no very heavy falls of R, ·83 in. on September 29th being the max. February and March show an excess above average of 1·76 in., and 1·84 in. respectively, and July, October and November, deficiencies of 2·24 in., 2·41 in., and 1·55 in.

DIVISION II.—SOUTH-EASTERN COUNTIES.

HASLEMERE, LOWER STREET.—R 1·36 in. above the average of 25 years. Little S fell again this year, some in January, some (with R) on March 1st, and a little on December 12th.

HASLEMERE, HAZELHURST.—A wet spring and a dry autumn. In January, February and March 13·45 in. of R fell, as against 6·27 in. in 1896; and in September, October and November 4·74in. fell, as against 13·71 in. in 1896. Mean temp. 49°; max. 84° on August 4th and 5th, min. 22° on January 22nd and December 4th. Frost in screen on 52 nights, on grass on 107 nights. Severe late frosts on April 10th, May 2nd and 13th. S fell during the latter half of January, and heavily on January 31st and February 1st, but heavy R soon washed it away. A TS on September 29th was notable for the frequency of L, sometimes averaging 8 or 9 flashes per minute; and that of December 14th for its lateness in the year. There was no absolute drought, but wells were low at the end of November.

WITLEY, FERNSIDE.—The second half of January was frosty, with falls of S. February and March were mild, with excessive R in the latter. Very cold in May and part of June. September and October were remarkably warm and fine, the R of the latter being much below the average. Mists were frequent in November and December, but the weather continued mild until nearly Christmas.

HASCOMBE, HALL PLACE.—Remarkable for periods of drought in May, and in the first half of June, and July and the first half of August.

DORKING, WOODCOTE.—R remarkably evenly distributed, no excessive fall occurring in 24 hours, and only March and December having excessive totals. S.W. gales were very prevalent in summer, and calms and fog in the autumn.

REDHILL, OXFORD ROAD.—R 2·52 in., and rainy days 7, less than the average of 31 years. March was the wettest month, with an excess of 2·57 in.; and there were excesses of beween 1·00 in. and ·50 in. in February, August and December. October was the driest month, with a deficiency of 2·92 in. November had a deficiency of 1·84 in., July of 1·71 in., and January of ·57 in.

REIGATE, DOODS.—Rather dry, especially about the middle and autumn months. R more than two inches below the average.

DORKING, HIGH ASHURST.—Spring was very cold and late. Vegetables, shrubs, &c., suffered much from cold, drying E. winds and scorching sun during June and July, which rapidly evaporated the R which fell. Autumn was exceptionally mild, allowing raspberries to be picked as late as November 27th.

WALLINGTON.—Remarkable for high temperature, the mean 50°·3 being, with the exception of 1893, the highest in 12 years. R about 2·50 in. below the average of 10 years, and particularly remarkable for the exceedingly small falls of July, October and November.

THAMES DITTON, THE HOLLIES.—A cold January; periods of great warmth at the ends of February, March and April. Very heavy R after great heat on June 24th, and a rapid fall of temp. Warm in July and the first half of August. Dry and very mild in the autumn.

DYMCHURCH RECTORY.—Weather strangely variable; 15·30 in. of R fell at night and 7·93 in. in the daytime.

TENTERDEN, SUMMERHILL.—The driest year since 1878. R nearly five inches less than the average. Great scarcity of water, wells and ponds being dry which had never dried before, and ponds half empty at the close of the year. One of the windiest and most tempestuous years remembered.

TENTERDEN.—Excess of R in the first quarter, and great deficiency in the last. Drought in May until the last week, and July even drier than in 1896, and nearly as hot; August much warmer than in 1896, with 50 per cent. more sunshine. The drought in October and November was the chief feature of the year. The second week in December was wet, and there was hard frost at Christmas. Frost in shade on only 41 days, and on grass on 86 days. Very little S, except in April, and heavy falls, which drifted badly, in January. Duration of sunshine 1,698 hours.

TENTERDEN, LITTLE WESTWELL.—The ground was in a very dry

state at the close, land drains having ceased to run since April. Wells that had never been known to fail before did so this year.

HYTHE, HILLHURST FARM.—R 1·02 in. less than the average of 13 years. Wind N. or E. on 144 days, S. or W. on 221 days.

FOLKESTONE, RADNOR PARK.—Total R 5·16 in. below the average of six years; very wet in the early part, and in excess of the average till the end of August. The latter part was dry, except December, when the R was in excess of the average.

HYTHE, FROGHOLT.—The features of the year were the cold winds in the late spring, and the extraordinary autumnal drought, which began about half way through September and lasted till nearly the end of November, resulting in a total R much below the average. Wells getting low.

TUNBRIDGE WELLS, CAMDEN PARK.—Taking the 14 years recorded, 1897 has established "a record" in the daily, the monthly and the quarterly falls, viz., by there being no daily fall amounting to one inch, and by the falls of March, of October, and of the last quarter.

	1897.	Max. or Min. 13 preceding years.	Average 13 years.
March.....	4·79 in.	4·26 in. in 1888	2·25 in.
October	·32 ,,	1·40 ,, ,, 1884	4·12 ,,
Last quarter ...	5·96 ,,	6·30 ,, ,, 1890	10·75 ,,

ASHFORD, BETHERSDEN.—A mild winter and spring, a wet March, and a dry May and October.

HORSMONDEN, SPRIVERS.—March was very wet, especially the first part; May very dry till just the end, when R came in time for the hay crop. June was dry, except for ·91 in. on 8th, and July and October were very dry. December was wet, except in Christmas week.

TONBRIDGE, PRIMROSE HILL.—R about the average. The first three months were wet and mild, March being the wettest for many years. May, June and July were very dry and hot, and October was the driest on record. November and December were mild, and the latter month was wet.

MAIDSTONE, MOUNT HOUSE.—R below the normal, and the smallest fall since 1884.

RECULVER, BROOK.—Although it appeared fine and dry, there have been in the previous 11 years three with less R and seven with fewer rainy days. Vegetation withstood the drought well, as the soil was never impoverished by heavy drenching.

MARGATE, APSLEY HOUSE.—Total R two-and-a-half inches below the average. No fall of an inch in 24 hours. Temp. slightly above the average.

CHISLEHURST, SOUTHLAUND.—R the smallest in 17 years, with the exception of 1893 and 1895.

CHICHESTER, WESTGATE.—R ·28 in. less than the average of 50 years. The first half of the year was much wetter than the second, while in October—usually the wettest month—there had not been so small a fall (·50 in.) for more than half a century.

MIDHURST, BORDEN WOOD.—R ·47 in. below, and rainy days 8 above, the average of 7 years.

IFORD, SWANBOROUGH.—Most enjoyable summer weather, but R came too late; what fell at the end of August was wanted at the beginning of July. Were ever the wells so low, or the ground so dry, at the end of the year?

FALMER.—Springs remarkably low at the close, although the R was only 1·40 in. below the average. A very pleasant year from beginning to end, and remarkable for the wonderful growth of vegetation in October. Only one fall of over an inch in 24 hours.

GUESTLING RECTORY.—October was the driest and March the wettest month of the year. Partial drought prevailed for 32 days from July 7th to August 7th, and for 39 days ending November 14th. Absolute drought for 19 days ending November 6th.

BUXTED, STRAWBERRY HALL.—A fine spring, a dry summer, a wet autumn, and a mild winter.

MARESFIELD, FOREST LODGE.—The R (29·92 in.) is 1·63 in. in defect of the average of the 40 years ending 1895. This is the more remarkable as, up to September 30th, the fall was actually 3·01 in. in excess of the average of the corresponding period. The R was ·75 in. in excess in February, 2·95 in. in March, ·28 in. in April, 1·00 in. in August, ·11 in. in September, and ·87 in. in December. On the other hand, it was ·59 in. in defect in January, ·13 in. in May, ·15 in. in June, 1·21 in. in July, 3·57 in. in October, and 1·96 in. in November. It was the wettest March and the driest October in the whole period recorded.

CROWBOROUGH OBSERVATORY.—R 5·23 in. below the average of 27 years. The wettest March and the driest October in the whole period occurred this year. More H showers were observed than for many years, but TSS were less frequent.

WADHURST, LOWER COUSLEY WOOD.—Water in wells very low

during the last three months of the year. A well 102 ft. deep, which in the previous ten years had rarely less than 2 ft. of water in it at any season, was dry from the middle of October.

FOREST ROW, HARBURY.—The wells in this locality were in many cases dry or very low about September, but after the December R they filled up to some extent.

WORTH, SOUTH HILL.—During the latter half of the year there was an unusual deficiency of water in wells and springs.

BONCHURCH, THE LILIES.—Few gales, mostly S.W. Few TSS. Duration of sunshine 1,940 hours. Ground temp. above the average. A splendid October and November, and December very mild.

BRADING VICARAGE.—The heaviest R recorded in any year but 1886 and 1894.

TOTLAND BAY, WILMINGTON.—R within an inch of the average. The first half of the year unduly wet, especially February and March; July and October very dry.

OSBORNE.—A very variable year. R considerably above the average in February, March, June, August and December; and below it in July, October and November. Total R just an inch above the average of 40 years.

CHRISTCHURCH, MUDEFORD.—The first eight months were unusually wet, the excess of R at the end of August being 6·38 in. The fall in March (4·69 in.) is the heaviest since observations began in 1869, and the valley of the Avon was flooded from February 1st to the middle of April. From June 30th to July 18th, only ·05 in. of R fell.

EMSWORTH, REDLANDS.—R ·56 in. above the average of 14 years. Springs, and soakage wells were drier than usual in December. The longest rainless period was 13 days in July.

NETLEY.—March and December were the wettest, and July and October the driest months. February 4th was the only day on which more than an inch fell.

FORDINGBRIDGE, OAKLANDS.—Beautiful weather in July, October and November, the latter month being the finest since 1879, when only ·35 in. of R fell. March very wet, and the wettest December since 1886.

BISHOPS WALTHAM, HILL PLACE.—The R for the first half of the year was very heavy, and exceeded only in 1879 in 22 years. For the first time in the same period, March was the wettest month of the year.

PETERSFIELD, FAIRLEY.—The R was average in amount, exceptional in incidence; the first six months had a fall of 17·48 in., as compared with an average for six years of 11·57 in.; while the latter half yielded only 16·26 in., the average being 24·06 in. The monthly fall to the end of May was above, thence (with the exception of August and December) below, the average. March was exceptionally wet, October and November abnormally dry.

HINTON AMPNER.—Total R only ·29 in. below the average of ten years, yet the springs continued to sink till after the R of December 7th. The unusual distribution of R among the months of the year, taken in connection with the lowness of the deep springs in December, should enforce the fact, so little regarded, that the summer R has a very small effect on springs, being mostly lapped up by vegetation.

WINCHESTER, HARESTOCK.—Frosts in spring were very detrimental to fruit. Much cloud prevailed in April, and also in the first part of June, but the latter month was very warm, with a max. temp. of 86°·6 on 24th; August also was dry and warm.

ROTHERWICK, TYLNEY HALL.—R about the average of 20 years, but it fell at the wrong time, the spring seed-time and harvest being very wet. Springs very low and many wells dry at the close.

HECKFIELD, PARK CORNER.—Ponds, wells and springs were at the end of December lower than ever remembered at that season, though the R of the year is not much below the average.

SUNNINGHILL, LYNWOOD.—The year was remarkable for more than half the R falling in the first six months, for the first time since the record commenced. There were no excessive falls in short periods. October and November were unusually free from storms. The early winter was extremely mild, the only frost worth mention being from December 21st to 25th.

DENFORD PARK.—Springs very low at the end of the year. The fall of only 1·07 in. of R in October and November most exceptional.

BRACKNELL, WARFIELD.—Very wet up to the Jubilee time, then drought set in, and mild weather, with very little R, lasted nearly to Christmas. Wells were almost dry at the end of November.

WINDSOR, ROYAL GARDENS.—R 2·59 in. below the average.

READING, CALCOT PLACE.—March was the wettest, and July the driest, month; a very unusual distribution.

READING, EAST THORPE.—R ·25 in. below, but rainy days 2 above, the average of 10 years.

NEWBURY, WESTON.—Chiefly remarkable for the drought during

May, July and part of August, also for the small quantity of R during October and November.

DIVISION III.—SOUTH MIDLAND COUNTIES.

SOUTHGATE, THE LAWNS.—Very unusual distribution of R. Excess in the early months and drought in the late autumn.

WATFORD, ST. ALBANS ROAD.—Unusually dry in autumn, especially October and November.

ST. ALBANS, THE GRANGE.—R 1·30 in. less, temp. 1° higher, and humidity 1 greater, than the average of 10 years. The three wettest months (March, August and December) had more than four times as much R as the three driest (July, October and November). October and November, usually almost the wettest months, had together only 1·81 in. of R, the previous lowest record being 4·03 in. in 1890, and the average 6·28 in.

DATCHWORTH RECTORY.—May and June were just moist enough for hay. Slight frost early in October, then none till December 22nd to 25th. October and November were very dry, and December not wet enough to compensate. It is feared that wells will fail.

HAMELS PARK.—The first four months were very cold, wet and windy, there being practically no spring, and the middle of June launched us straight into summer. The autumn was remarkably mild.

HITCHIN, HIGH DOWN.—R 2·05 in. below the average. May was cold and dry, and July and October were very dry.

SLOUGH, LANGLEY.—Only 10·11 in. of R fell in the last six months of the year; 1889, when 9·11 in. fell, is the only instance of less falling in the corresponding period, since 1872.

HEDSOR.—The winter and early spring were generally mild, with heavy R in February and March. April and May were cold and unseasonable, with harsh winds, sharp frosts at intervals, and very little R after April 20th. June was warm, and heavy R fell at times. July very dry, and a wet August was followed by a remarkably dry autumn, with pleasant, still weather, and a total absence of gales and high winds. After hard frost and fog at Christmas, the close of the year was mild and wet. Total R above the average of 30 years by ·59 in. Absolute drought for 21 days ending July 19th, partial for 37 days, with ·30 in. of R, ending August 4th.

CHALFONT ST. GILES, THE STONE.—An unusually large fall of R in first half year, and a dry October and November.

AMERSHAM.—A very wet March. Partial drought from May 1st to 25th, with ·14 in. of R on 2 days, including an absolute drought from 12th to 25th; partial drought also from June 29th to July 18th, with ·03 in. of R on one day.

ADDINGTON MANOR.—R nearly four inches above the average of 10 years, although the only really wet month was August, the first week of which was very hot.

CULHAM VICARAGE.—A fine year. Chiefly remarkable for the wonderfully fine autumn, October and November both being fine and dry. R two-and-a-half inches below the average. The fall of the first three months nearly equalled that of the first six months of 1896.

PYRTON MANOR.—R slightly above the average. No droughts; but July, October and November had R much below the average.

OXFORD, ST. GILES'.—R 4·11 in. above the average of 10 years, and only three times exceeded. Rainy days 8 below the average.

CHARLBURY.—R somewhat in excess of the average. Spring was late and cold, and there was great prevalence of fog in the late autumn.

CHIPPING NORTON, KINGHAM.—R slightly above the average of 20 years. July, October and November, usually the wettest months of the year, were dry.

BANBURY, BODICOTE.—Total R three-quarters-of-an-inch above the average; the special features were the small fall of July, viz., ·63 in., and the heavy fall of August, viz., 4·17 in.

CASTLE ASHBY.—The R in the first three months equalled that of the first six months in 1896.

SCALDWELL.—R 3·49 in. more than the average of six years. Summer too dry for corn, and harvest time very wet. A very mild autumn, producing much winter keep.

MAXEY VICARAGE.—R 3·15 in., and rainy days 18, less than the average of 15 years. The longest wet period was 6 days ending June 20th, and the longest dry period 17 days ending May 27th.

ABINGTON PIGOTTS.—R 1·28 in. above the average of 10 years. A mild winter, with much S in January. July hot, but not much T and L. Drought from June 30th to July 19th.

CARLTON HALL.—Wet weather during August and the beginning of September prolonged the harvest, and seriously damaged the quality of the late barley. The autumn was unusually fine and warm.

DIVISION IV.—EASTERN COUNTIES.

BILLERICAY, BURGHSTEAD LODGE.—R a little below, but rainy days 11 per cent. above, the average of 10 years. The first half, usually the drier, had 13·51 in. of R; while in the second half, 9·05 in. fell.

HAVERING GRANGE.—A wet spring, with late frosts and violent changes of temp.; a dry summer, scorching sun and warm nights; beautiful weather at the end of September and in October.

CHELMSFORD, HIGH STREET.—R exactly the average of 30 years.

BRAINTREE, FENNES.—R nearly 5·00 in. below the average. Distribution peculiar. July and October, usually the two wettest months, were the two driest; and February and March, normally the two driest, had more R than any other two consecutive months. The first six months had more than half the total fall, and were over the average, whereas, for several past years they have been below it.

HARWICH, RAMSEY.—The R was not much below the average, but at the close of the year there was no moisture in cultivated ground, none in the ditches, and the watercourses and springs were the lowest in living memory. In the first half-year 12·42 in. fell, and 8·94 in. in the second half.

ERWARTON HALL.—In the first six months 12·37 in. of R fell, and in the second six months 8·51 in. This is the only year since 1878 that the R of the first half has exceeded that of the second, but in that year the two halves had practically an equal fall.

IPSWICH, BISHOPS HILL.—R 1·47 in. less than the average. January, February, March, April, June, July and September all had R above the average, while May, August, October, November and December all had less than the average. October and November were remarkably dry, with an aggregate of only 1·42 in.

RENDLESHAM HALL.—Extraordinarily fine in October and November, with strong gales and high temperature in December. Much fog in the last two months. A windy year.

DARSHAM, SIBTON.—R below the average. The first three months were wet, May was dry, July very dry, and October and November very dry for the time of the year. The feature of the year was the dry period from October 3rd to November 26th, during which time nothing but light showers fell. No heavy TSS.

SOUTHWOLD.—A little warmer and drier than 1896, but gales were more numerous and stronger.

GELDESTON.—R about 5·00 in. below the average. July very dry, and the smallest fall in October since 1866.

YARMOUTH, MARKET PLACE.—R 5·05 in. below the average, but the total was less in both 1893 and in 1896.

NORWICH, BRUNDALL.—R 4·83 in. below the average; making the third year in succession with a deficit.

NORWICH, ESSEX STREET.—R 2·80 in. below the average of 59 years. The fall during the last 6 months (10·29 in.) is 4·30 in. less than the average, and the least since 1873, when it was only 9·53 in.

SPROWSTON, OAK LODGE.—R about 3·50 in. below the average. More R fell in the first six months than in the last six, a very unusual occurrence. July was the driest for 60 years, and October also, with two exceptions.

EAST DEREHAM.—The winter was mild; the spring was changeable, the temp. of March being above the average, and that of April below it. The summer was fine and hot, and the autumn remarkably fine and dry. R for the year about 4·00 in. below the average.

DERSINGHAM VICARAGE.—Nearly one-third of the year's R fell in August and September.

DIVISION V.—SOUTH-WESTERN COUNTIES.

BROAD CHALKE.—The driest November on record, but the total R is the greatest in the 15 years recorded.

MERE DOWN.—R more than the average. The autumn was remarkably fine, with absence of severe frosts and a small R in October and November. December was boisterous, with heavy R and three falls exceeding an inch in 24 hours.

MAIDEN BRADLEY.—R 2·98 in., and rainy days 4, above the average of ten years. There were four falls exceeding an inch in 24 hours, three of which occurred in December.

BISHOPS CANNINGS.—Deep wells were very low in the autumn, and still lower at the end of December.

WINTERBOURNE STEEPLETON.—An inch or more of R fell on four days. The longest rainless period was 13 days from July 6th, but in 19 days from October 19th, only ·01 in. fell; and in 18 days from June 29th, only ·04 in. fell.

WAREHAM, BINNEGAR HALL.—R 2·88 in. above the average of 10 years.

BLOXWORTH RECTORY.—Remarkable for absence of TSS.

BEAMINSTER VICARAGE.—The R exceeded the average of 10 years and more than half the days were rainy. There were no very heavy falls, only three days just exceeding an inch.

WIMBOURNE MINSTER, CHALBURY.—R nearly 4·00 in. above the average, though January, July, October and November had falls considerably below it, and there was only one fall of an inch in 24 hours.

SANDFORD ORCAS RECTORY.—Although the total R is not very large, the year was marked by heavy storms, falls of an inch or more occurring on three days. Drought threatened at one time, but in December no less than 3·16 in. of R fell in 11 consecutive days.

IVYBRIDGE, LANGHAM HILL.—Total R nearly 5·00 in. above the average. The spring, to the end of April, was extremely wet. July was very dry, with 3·50 in. less than, or only one-sixth of, the average. August and September had rather more than the average R. October and November very fine and dry, but December was wet and very mild.

PLYMPTON, HEMERDON.—Notwithstanding the much larger R than in 1896 (especially in the first four months, when 21·90 in. fell, against 8·16 in. in 1896) the springs were very low in the autumn, and did not rise to their normal height till November.

TORQUAY, CARY GREEN.—Total R above the average. Duration of sunshine 1,706 hours, or 5 hours below average. Absolute drought for 19 days ending November 7th, and for 12 days ending July 18th. Three falls of R exceeding an inch.

TORQUAY, WATCOMBE PARK.—R 6·16 in. above the average of 12 years.

TAVISTOCK, ROSE VILLA.—Wet, with about average temp. The longest dry period was 11 days ending January 20th, and the longest wet period 16 days ending March 23rd. TSS on 4 days, L on 8 days. Harvest interfered with by showers from August 5th to September 8th. Mean temp. 50°·5. Humidity 84. Cloud 6·7.

EXMOUTH, BETWORTH.—The wet period which began in 1896, continued to the end of April, 1897, and August and December were both very wet. The autumn, after September 8th, was very dry.

POLAPIT TAMAR.—The wettest year for 15 years, the total R exceeding the average by 5·95 in. October and November, usually the two rainiest months, were this year remarkably dry.

ROUSDON.—The first half was generally dull, wet and changeable with a considerable excess of R and deficiency of sunshine. During the latter half of the year, these conditions were considerably modi-

fied, and the year ended with a total R 5·26 in. above the average, and an excess of about 40 hours of bright sunshine.

HEANTON SATCHVILLE.—R 5·65 in. above the average of 13 years. The heavy R of March and April hindered tillage, and much corn was injured by the almost daily R from August 6th to September 8th.

SOUTH MOLTON.—The wettest year for ten years.

INSTOW.—February, August, September and December were unusually wet, October and November remarkably fine and mild.

PARRACOMBE.—R far above the average, but few falls exceeding an inch. A very good summer for harvest. Springs abnormally low in July.

ST. AGNES.—R about 1·50 in. above the average of 30 years.

EMPACOMBE.—R 3·58 in. above the average of 7 years. Only three days on which the fall exceeded an inch.

STRATTON, TRELANA.—R above the average, remarkable, more for the heaviness of the falls than, for the number of wet days.

YEOVIL, WEST COKER.—R 3·50 in. above the average of 13 years, but the fall was deficient in the first half.

WELLINGTON, THE AVENUE.—The summer was mostly fine, sunny and warm, as also were October and November. December was the wettest month.

CRANMORE HALL.—R ·73 in., and wet days 3, more than the average of 15 years.

NORTH CADBURY.—A year of extremes; either much wet, or great dryness. No excessive floods, but long batches of rainy days; 1·61 in. of R fell in 50 hours (January 30th to February 2nd), 1·45 in. in 25 hours (June 8th and 9th), and 1·23 in. in 28 hours (December 28th and 29th). The longest absolute drought was 19 days ending November 6th; droughts also occurred from May 8th to 24th, June 29th to July 18th, and October 19th to November 26th.

MELLS RECTORY.—There were dry periods of 13 days in May, 11 days in July, 10 days again in July and August, and 19 days in October and November; the dry and mild autumn being quite exceptional.

STON EASTON.—R 2·48 in. above the average of 29 years.

HARPTREE COURT.—R 2·99 in. more than the average of 15 years. The R was very unevenly distributed; March, April, August and December being very wet, while May, June, July, October and November (the two last usually the two wettest months of the year) were very dry. Drought prevailed for 19 days ending May 24th, and for 18 days ending November 6th.

WRINGTON, WEST HAY.—R 6·88 in. above the average of 10 years.

LONG ASHTON.—R 3·14 in. above the average of 24 years.

CLEVEDON, WATER WORKS.—R 2·80 in. above the average of 28 years.

DIVISION. VI.—WEST MIDLAND COUNTIES.

CLIFTON, PEMBROKE ROAD.—R nearly 3·00 in., but rainy days only 2, above the average of 41 years. February, March and April, normally the three driest months, were this year among the wettest, with an excess of 70 per cent.; but October and November, two of the wettest months, were among the driest, with less than half the average.

BRISTOL, FISHPONDS.—A fairly favourable year, with R above the average. August was exceedingly wet, but very fine and mild weather prevailed during the autumn, especially in October. Temp. above the average, except in January, May and September.

HATHEROP RECTORY.—Notwithstanding the extreme dryness of the latter months of the year, the total R is just one inch above the average of 27 years.

GLOUCESTER, BIRDLIP HILL.—Not remarkable for the total R, which is only 5 per cent. over the average, but for its distribution. The six months January, February, March, June, August and December had much more R than the average, leaving the other months deficient. By May 1st, as much R had fallen as by September 1st, 1896, yet the end of April and parts of May were so dry that the hay crop was only just saved.

GLOUCESTER, LOWER BARTON STREET—A fine year, with R 1·79 in. above the average. There was no severe cold at the beginning or end of the year; no S, and no heavy falls of R. Partial drought for 40 days ending May 27th, with ·38 in. of R; absolute drought for 20 days ending July 18th, and for 18 days ending November 6th.

CHELTENHAM, NAUNTON PARK VILLAS.—R just the average of 30 years. Mean temp. 2° above the average of 10 years. The year would have been very fruitful but for the inclement May. Absolute drought prevailed for 19 days ending July 18th, and R fell on 23 consecutive days ending September 9th.

ROSS, THE GRAIG.—No remarkable falls, the R nearly the average and on the usual number of days. May, July and October had

each rather more than half the ordinary fall. March, August and December were wet, and April had almost constant R, but a total not much in excess of the average.

BRYNGWYN.—Good weather for agriculture. During summer there were many very fine days, with R in the night, and T was frequent.

MORNEY CROSS.—As for several years, May was very dry, but heavy R fell on one or more days in each of the other 11 months.

PUTLEY COURT.—A very productive year, attributed to the fact that in summer at least ·50 in. of R fell on one day in each month; sufficient to get into the ground.

BODENHAM VICARAGE.—The autumn was not so dry here as elsewhere, as in October and November occasional storm rains fell.

PEMBRIDGE, MARSTON.—March was very wet, and also June, 1·20 in. falling on 8th. In the 33 days from August 6th to September 8th, 4·71 in. of R fell, and there were only three dry days. October was fine and warm, and December wet. Very little T.

CHURCH STRETTON.—R ·33 in. less, but rainy days 6 more, than the average of 5 years.

MIDDLETON CHIRBURY.—Springs very low at the end of the year.

WOLVERHAMPTON, TETTENHALL.—No droughts, either absolute or partial, and rainy days 23 more than the average.

UPTON-ON-SEVERN, THE EADES.—Remarkable for very fine weather without drought. A mild winter, and favourable spring, with the exception of extreme cold in the second week of May.

LEIGH LODGE.—More R and rainy days than in 1895 or 1896. R fell most abundantly in August, though the greatest downpour occurred on June 9th.

WESTON PARK.—R in February and March made agriculture difficult, and August spoiled much corn; but the weather altogether was better than for some years. The autumn was quite good.

STRATFORD-ON-AVON, GUILD ST.—R the exact average of 20 years.

RAGLEY HALL.—A very large proportion of the R of the year fell at night.

RAGLEY GARDENS.—The weather throughout was seasonable and favourable for outdoor occupations. Autumn exceptionally mild, but several storms of wind and R occurred in November and December.

KENILWORTH, THE SPRING.—R 1·95 in. in excess of the average of 15 years.

COVENTRY, PRIORY ROW.—A fine year, with a great amount of sunshine and warmth. Generally productive.

COVENTRY, STOKE.—A warm, beautiful and productive summer with much sunshine and fine weather, especially in July.

DIVISION VII.—NORTH MIDLAND COUNTIES.

ROTHERBY HALL.—Another dry year, with R 2·52 in. less than the average of 29 years. June and August were the only months without frost on grass. The greatest R in 24 hours was ·77 in. on August 30th, but slight floods occurred in February and March. The summer generally was dry and warm, though August was wet.

UPPINGHAM, WEST DEYNE.—The first quarter was abnormally wet, with R 3·18 in. above the average of 20 years, and unprecedented in that time; the last quarter very dry, the R being 3·10 in. below the average, and, with two exceptions, the least recorded. From May 1st to 24th, only ·03 in. fell, and from June 25th to July 18th, ·03 in.

LONG SUTTON.—Spring weather came very late, and the two months in which dry weather is most needed (August and September) were the wettest. The autumn was very favourable, and the seed was well got in.

MININGSBY.—With a drainage area of 3 square miles, and a daily consumption of 320,000 gallons, there was no flow over the waste weir from April 30th to December 1st. The storage was drawn on from April 30th to November 30th, and there was no flow from the gathering ground from June 3rd to November 7th, though August and September were wet.

SPILSBY, BOSTON ROAD.—R 5·22 in. below the average.

LOUTH, GOSPELGATE.—R 3·54 in. below the average. Mean temp. 48°·7, or 1°·3 above the average.

LOUTH, WESTGATE.—R 3·22 in. below the average of 24 years.

HORKSTOW.—A very cold and wet spring, with much E. wind. Great damage to corn by excessive R in August and in the early part of September. Very fine and open weather quite into winter, and plenty of grass.

STRELLEY HALL.—A sunny year, with a dry summer and autumn, and no extreme temp.

HODSOCK PRIORY.—Warm and bright, with a deficient R. The mean temp. (48°·6) is 1°·1 above the average, and exactly the same as in 1896, though it has only twice been exceeded in the last 21 years. The max. temp., 89°·1 on August 5th, is the highest since 1876; the min. was only 19°·9, and we have to go back to 1884 for a year in

which lower temperatures were not recorded. January was the only cold month. R about 11 per cent. below the average, a considerable excess during the first three months having been more than compensated by a deficiency during the rest of the year. There were 1,362 hours, or 31 per cent., of sunshine, which is 115 hours more than the average; the brightest months being May, July and August.

WINSHILL [BURTON].—Remarkable for the small R of July and of October.

CHELLASTON.—With the exception of May, July and October, which were dry, all the months had average R or more. February, June and December had the greatest falls.

HAZELWOOD, CHEVIN.—R 2·57 in. above the average of 12 years.

DIVISION VIII.—NORTH-WESTERN COUNTIES.

NESTON, HINDERTON.—R 13 per cent. less than the average of 28 years.

GARSTON, GRASSENDALE PARK.—The most striking feature is the remarkably small fall in July, viz., ·96 in. on 9 days, the average of 19 years being 3·42 in. on 17 days.

AIGBURTH, KELTON.—R ·36 in. below the average of 22 years.

HEATON MERSEY.—The greatest R was on November 30th, when 1·59 in. fell, being equal to the total fall of the preceding month. On 9 days the fall exceeded ·50 in.

BOLTON, THE PARK.—No absolute drought occurred during the spring or summer, but 14 rainless days were recorded ending November 7th, and remarkably fine and genial weather prevailed from October 16th to November 11th. The mean temp. (47°·6) is 1°·2 above the average; frosts occurred on only 33 days, or 25 fewer than the average. Sunshine was registered on 244 days, the total duration (1,103 hours) being 105 hours more than the average; May and July were exceptionally bright, with 229 hours and 207 hours respectively. R 3·17 in., and rainy days 17, above the average; the fall on three days exceeded an inch. There were more gales than usual.

SOUTHPORT, HESKETH PARK.—A warm year, but fairly normal in all other respects. Mean temp. 1°·0 above the average of 25 years. Cool in January, particularly sunny during July and most of August, and unprecedentedly so in May; remarkably cloudy in February and June. Total R 2·24 in. below the average. No very wet months;

driest ones, January, July, May and October, the last being a thoroughly pleasant month.

HASLINGDEN VICARAGE.—The R was moderate; more than an inch in 24 hours occurring only once. Though December had the largest total, March and August show the longest continued rains. The driest period was 26 days, from October 17th to November 11th, during which only ·15 in. fell.

ST. MICHAEL'S-ON-WYRE.—R slightly above the average. March, April, June and August were very wet, but a long spell of fine weather occurred at the end of October, no R falling in the 20 days ending November 6th.

GARSTANG, BRUNA CROFT.—The most remarkable feature of 1897 was the period of 20 days' drought from October 18th to November 6th, during which time almost continuous sunshine was daily experienced.

CLITHEROE, DOWNHAM HALL.—R about 4·00 in. above the average.

CHATBURN, MIDDLEWOOD.—R 5·30 in. above the average of nine years.

GARSTANG, FORTON.—A warm summer, with many fine days, was followed by some beautiful days in September, and by a second summer commencing on October 18th; for 20 days from that date the sun shone and no R fell. The R of 1897 was, however, greater than in any of the four preceding years.

ARKHOLME, STORRS HALL.—R about 5·50 in. above the average. April was cold, and there were four frosty nights in May, but afterwards the season was good from an agricultural point of view. August and September were wet, and November and December warm and wet.

GRANGE-OVER-SANDS, BELMONT.—January, May and July were very dry, but March, November and December very wet. Total fall probably about the average.

CARTMEL, PIT FARM.—R 2·36 in. above, and rainy days exactly, the average of 19 years. January and July were exceptionally dry, May was rather dry, and March, June, November and December were exceptionally wet.

CARTMEL, BROUGHTON HALL.—R about 6·50 in. above the average of 30 years. March, November and December were wet, June, August and September had average falls, and the six remaining months were dry. The late months were calm and mild, the first frost occurring on November 15th. From July 9th to 24th, the weather was quite dry during hay harvest, as in 1896.

CARTMEL FELL VICARAGE.—Heavy R, especially in November and December, when almost one-third of the total fell.

SEATHWAITE VICARAGE.—The greatest R of any of the 9 years recorded, and exceeding the average by 14 per cent. Temp. low throughout, but no severe weather after January.

DIVISION IX.—YORKSHIRE.

WATH-UPON-DEARNE, CHAPEL STREET.—R about the average. Temp. mild, no frosts occurring between May 12th and November 16th. January was the wettest month and July the driest.

WENTWORTH CASTLE.—R 5·09 in. below the average of 21 years.

DONCASTER, MAGDALENS.—R 1·45 in. less than the average of 30 years. Harvest began on July 19th, which is unusual.

MELTHAM, HAREWOOD LODGE.—R slightly above the average, and on the whole evenly distributed. March, however, was very wet, and July and especially October were dry. The year was again rather warm, like 1896, with little frost, except in January and on a few days in December. July was very fine and warm. TSS were rather few in number, and none very severe.

WAKEFIELD, WALTON.—R 4·02 in. below the average of 22 years. It is remarkable that the R of the first six months should have been 3·15 in. in excess of that of the second six. Strong winds were frequent up to August, doing much damage to trees, but there was a notable absence of wind afterwards.

HUDDERSFIELD, DALTON.—R 7·75 in. above the average of 32 years.

WAKEFIELD, STANLEY GRANGE.—The first four months were unsettled, and much S fell in January and February. May was remarkable for the persistence of dry E. wind. June was very showery, with variable temp. July was the driest and brightest for many years, with only ·46 in. of R on 5 days. The three weeks ending September 7th were very wet, but the following 12 were comparatively dry.

HALIFAX, S. OWRAM.—R ·78 in. above the average of 7 years. June was the wettest month, with 4·09 in.

HEBDEN BRIDGE, FALLING ROYD.—January and February were rather milder and drier than the average. March was very wet, with little E. wind. The first 11 days of April were very cold and dry, and May also was cold and dry, the mean temp. of the first 12 days being only 44°·0; from 15th to 24th no R fell, and the sky

was cloudless every day. From June 22nd to August 5th splendid weather prevailed, but the rest of August and September was rather wet. October was fine and warm, and November mild, the mean temp. being 3° higher than in April, and only 2° less than in May. December was wet, with several wind storms.

LEEDS, ELMET HALL.—There was frequent S in January and in the first week of February, with stormy weather; but the rest of that month was mild. March was damp, and April cold and showery. May was cold, and June boisterous and showery. July was dry and hot, August dull and wet, and the first week of September cold and stormy. October was fine and dry, November dull, damp and foggy, and December wet, foggy and mild.

LEEDS, HORSFORTH.—As in 1896, February was dry and March very wet, but August was the most persistently wet month, when the rainy days numbered 25. No frost on grass from May 31st to October 1st.

ILKLEY, EATON ROAD.—Remarkable for the large number of rainy days and for the very foggy autumn, October being especially gloomy.

SLAIDBURN, WHITEHOLM.—R 6·69 in. above the average of 9 years.

SETTLE, THE TERRACE.—A very wet year, especially so in August and December.

SEDBERGH, BRIG FLATTS.—Rather more wet days, and a larger R than usual. A good hay time.

HORNSEA, ELIM LODGE.—R ·80 in., and rainy days 14, less than the average of six years.

THIXENDALE.—Cold, winterly weather, though not severe, and with warm intervals lasting into May. Some very cold weather again early in July. The nights exceptionally warm throughout August. An early harvest, finished in bad weather, in September. October was a splendid month, still and warm, but foggy from 26th. Strong gales in December, and Christmas remarkably mild.

BALDERSBY.—R ·42 in. more than the average of 10 years.

THIRSK, SOWERBY.—R 4·30 in. below the average of 18 years.

LEYBURN, BOLTON HALL.—R 1·69 in. below the average of 21 years.

CLOUGHTON, BURNESTON.—R slightly below the average. The year was marked by some long, dry periods, and some long, wet ones.

RICHMOND, THE GROVE.—Remarkable for the fact that in no 24 hours did one inch of R fall; the first such year remembered.

INGLEBY MANOR.—R 1·22 in. below the average of 10 years, with

no fall of an inch in 24 hours. The first three months were wet (March 5·09 in., the wettest yet registered), then dry till August 10th, and wet again till the middle of September; afterwards dry till December. A beautiful, mild autumn.

WHITBY, MULGRAVE CASTLE.—The early part of the year was wet and cold, and the spring was very cold. The early part of summer was cold and dry. Autumn was grand; October and November being glorious.

MIDDLESBOROUGH, ORMESBY.—May was fine, but with very cold E. winds; June was changeable, and July fine, with occasional thunder showers. August was variable and very showery. September a fine month, hot about the 12th. October was dry and very fine, with fog and mist at the end. November was very mild, and December mild and damp., but with little R.

DIVISION X.—NORTHERN COUNTIES.

DARLINGTON, CLEVELAND PARADE.—Another decidedly dry year, though about an inch more R fell than in 1896.

SEAHAM VICARAGE.—A fine year, the R being rather less than in 1896, but more equally distributed; hence all field crops were fairly good, and gathered early. The fruit crop was spoiled by rough, N.E. wind, which blew persistently from May 12th to 24th.

PAWSTON.—The R of July and October respectively was concentrated into practically 48 hours in one case and 24 hours in the other, as 3·00 in. fell in July (out of 3·70 in.) and 1·10 in. in October (out of 1·42 in.) in those periods.

MILLOM, LEYFIELD.—R 3·78 in., and rainy days 9, above the average of 7 years. Absolute drought prevailed for 20 days from October 18th to November 6th, making what Cumberland farmers call "a grand back end."

KIRKSANTON, THE CROFT.—R excessive; about 10 inches more than in 1896.

BRAYSTONES.—R 7·55 in. above, and evaporation 1·70 in. below, the average of 33 years.

LORTON, FAIRFIELD.—January was dry and pleasant, but the weather then became unsettled, and March was very stormy; it continued blustery and unsettled with but little intermission till July, which was splendid, giving one of the finest and fastest hay times remembered. In August the weather became unsettled again, and

continued so for the most part till October 18th, when another fine spell set in, and continued till November 10th. The autumn was remarkably mild.

ULLOCK.—May and the early part of June were unusually cold; then a change came, and vegetation made rapid progress. From October 19th to November 7th, warm, sunny weather without R prevailed, but the rest of the year was unusually wet. On the morning of the 13th and the afternoon of 14th, the river Marron was fuller than it had been for 25 years.

COCKERMOUTH, BROUGHTON GRANGE.—R about 6·00 in. in excess of the average of 25 years.

PENRITH, GREYSTOKE.—S fell as late as May 12th, and then not till November 28th, after the finest autumn remembered.

BRAMPTON, DENTON HOUSE.—R ·51 in. above the average of 10 years. Taking the year as a whole, it was a very fine one.

KENDAL, NATLAND PARK.—R 2·33 in. more than the average of 10 years.

KENDAL, ELLERGREEN.—The heaviest R for many years, but only one more rainy day than in 1896.

SHAP, HILLFIELD.—A very wet year, March and December exceptionally so. October very dry.

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.

LLANFRECHFA GRANGE.—A fine and warm summer, but R hindered the harvest. Several heavy gales.

TREDUNNOCK.—R about 7·00 in. above the average.

LLANVIHANGEL COURT.—May was cold, June variable, July very dry and sunny, and August very sunless and wet.

OYSTERMOUTH, NEWTON.—January was dry and seasonable, but February, March and April were the wettest ever remembered. May, July and October, usually wet months, were remarkably fine and dry; and May was cold with frosts at night. November had many fine days, with sun. December was very wet and mild. Violent storms were frequent throughout the year, with snatches of sunshine between.

SWANSEA, UPLANDS CRESCENT.—Extremely wet throughout, and the total R considerably above the average. Practically no S, but

there were two falls of R exceeding an inch in 24 hours. Even in the driest month (May) R fell on 12 days.

NEATH, FAIRY LAND.—R very heavy, being the greatest in any year except 1891, and 10·89 in. more than the average of 13 years.

HAVERFORDWEST.—Excepting a cold spell from 13th to 22nd, and the heavy fall of S covering the Precelly Hills on 25th, the weather of January was open and wet, and the general character of the spring was mild and wet. Drought prevailed from May 7th to 22nd, and notwithstanding the persistent R of the spring, had not R opportunely come, the hay crop and cereals would have been a failure. June and July were wet and uncertain, although the temp. was above the average. August was very wet, and bad harvest weather was the rule. September was no better, having 20 wet days, some storms, and lower temp. than usual. October was one of the finest and driest months of the year, and enabled the farmers to save the late harvest. The fine weather lasted for the first 6 days of November, but there was foggy and stormy weather towards the end. December was unusually wet and stormy to 16th, thence slight frost to Christmas, and the year ended stormy and mild.

ST. DAVIDS.—The first two months were wet and winterlike; March was stormy, wet and foggy, with bright intervals, and April was unsettled. May, June and July were fine, dry and warm; August and September changeable and showery, October was fair and seasonable, November wet and foggy, with ground frosts, and December rainy and stormy, and boisterous towards the close.

STRATA FLORIDA, HAFOD.—The winter was not unusually severe; the spring was cold; March being wet and May dry.

LLANFRYNACH, TYMAWR.—There were ten falls exceeding an inch in 24 hours, two occurring in November and four in December, the greatest being 2·59 in. on December 29th.

BRECKNOCK, THE BARRACKS.—There were exceptionally heavy falls of R in June, July, October and December, and on December 30th the whole Usk valley was flooded.

LLANDEFAELOG-FACH.—The heaviest R, with the exception of 1882 and 1894, since the gauge was first set up in 1879. The fall of December is also a record since 1879. Easterly winds have been very prevalent.

POOL QUAY VICARAGE.—R ·36 in., and mean temp. 1°·4, above the average of 10 years.

ST. ASAPH, NANTLYS.—R 5·18 in., or 18 per cent., less than the average of 10 years.

ROSSET, TREVALYN HALL.—R more than 4·00 in. below the average. No very heavy falls occurred, and there was a remarkable absence of TSS. The R of July (·49 in.) is the smallest in 30 years.

COLWYN BAY, NANT-Y-GLYN.—R 2·00 in. less than the average of 19 years. February, March, April, August, September and December all had more than the average, and January, May, June, July and October were deficient. November had exactly the average. July was the driest recorded in 20 years.

COLWYN BAY, INGLESIDE.—R below the average, owing to a long spell of dry weather during the summer months; 6·97 in., or nearly a quarter of the total, fell during the last 36 days of the year.

LLWYDIARTH ESGOB.—March and April were wet and drizzly, bad for sowing and harrowing. The autumn was fine, but from November 10th to December 18th there was almost continual R and high wind.

LLIGWY.—Dry in January, then wet and mild till May, which was dry, with brilliantly fine weather. Very wet and stormy in August and September, succeeded by a dry and fine October. The total R in November was very heavy, 7·48 in.; this amount, however, fell on 14 days, including falls of 1·52 in. on 12th, 1·36 in. on 17th, and 1·50 in. on 30th; many days being very fine and warm.

DOUGLAS.—Winter, though open, was almost interminable. It may be said to have begun in September, 1896, and June, 1897, hardly saw its end. A cold April brought little relief to the colder ground, sodden with seven months' rains, till after the 21st, when signs of spring appeared, but the piercing, cold winds and drought of May were disastrous to spring crops. June was cold and wet beyond precedent. On July 9th, a very welcome change occurred, and, for a calendar month, fine, warm, summer weather prevailed; the rest of August was wet and stormy. September came in with torrential rains, low temp. and gales; but the weather improved after the 21st, and October was beautiful and exceptionally calm, the harvest being fairly well saved. November, though wet, was also calm and very mild; two wonderful autumn months. December was mild, but wet and very stormy.

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

GALLOWAY HOUSE.—Excessively wet in March, June and December, the latter being the wettest month since November, 1890. R much below the average in October and November.

GLENLAIR.—Total R more than 12 inches in excess of the average.

DUMFRIES, IVY BANK.—Total R about 5 inches above the average, though only twice did the daily fall exceed an inch, both in December.

MAXWELTON HOUSE.—Total R 7·50 in. above the average of 10 years. December having run it up with a fall of 10·04 in., a fall exceeded only by 10·24 in. in November, 1890.

LANGHOLM.—R 12·55 in. above the average of 10 years.

HAWICK, BRANXHOLME.—The year was a wet one; not so much as regards total R as number of rainy days, hay-time and harvest being very trying.

MELROSE ASYLUM.—Total R ·69 in. more than the average of 15 years; 6 years being wetter and 9 drier. Rainy days 8 fewer than the average. The max. fall (1·08 in. on September 1st) is ·17 in. less than the average, and has been exceeded in 11 years out of 15.

DIVISION XIII.—SOUTH EASTERN COUNTIES.

DRUMMORE.—August was the wettest month, with nearly one-sixth of the total for the year, and January was the driest month, with less than 1·00 in. Westerly wind on 105 days, with R on 59 of them.

EDINBURGH, BLACKET PLACE.—R 5·10 in. below the average. Mean temp. 0°·7 above the average of 133 years.

DIVISION XIV.—SOUTH WESTERN COUNTIES.

BARRHILL, DOCHROYLE.—R ·86 in. more than the average of 22 years.

COLMONELL, CLACHANTON.—R ·18 in. above, but rainy days 15 below, the average of 21 years. Mean temp. 1°·9 above the average Frost on only 61 nights, or 32 less than the average.

BARR MANSE.—The chief features of the year were the heavy R of June 15th (2·05 in.) and the excessive fall in August (7·70 in.).

CULZEAN GARDENS.—A very cold, sunless year.

LOCHWINNOCH, GARTHLAND.—The year was characterized by un usually frequent heavy downfalls, but the total is about the average. There were 37 days on which the fall reached or exceeded ·50 in., and 10 days on which it reached 1·00 in.

DIVISION XV.—WEST MIDLAND COUNTIES.

DUMBARTON, LEVEN SHIPYARD.—Total R the greatest in any year since 1884. There were two exceptionally heavy falls in 24 hours, 2·12 in. on June 15th, and 1·98 in. on August 11th.

CRAIGEND CASTLE.—A cold year, with R above the average; June and August being specially wet.

BUCHLYVIE, THE MANSE.—On the whole variable, with sudden changes, and R 3·92 in. more than the average of 8 years. The fall was less than the average in January, May, July, October and November, in the other months more, especially March, June and December, when the amount of excess was 2·63 in., 3·64 in. and 1·41 in. respectively. Rainy days 11 above the average.

TIGHNABRUAICH.—A wet year; R frequently falling with high bar. and during the prevalence of N.W. and N. winds, which usually bring dry weather.

OBAN, THE CORRAN.—R 2·81 in. above the average of 10 years; the months in which the excess occurred being February, March, April, May, June, July, September and December.

BALLACHULISH, ARDSHEAL.—Apparently a wet year, yet the R and rainy days were below the average.

BALLACHULISH, CRAIGRANNOCH.—Very changeable, with more than average R. S storms and keen frost during the first five weeks; a cold, wet spring, and late summer; the first S of winter exceptionally early, on September 3rd. October exceptionally fine, and the close of the year wet.

DIVISION XVI.—EAST MIDLAND COUNTIES.

KINROSS, GELLY BANK.—The spring was wet and cold, and May droughty; a good R fell in June, but there was too much in August.

OCHTERTYRE [STIRLING].—R about two inches above the average of 14 years, but June and August were both unusually wet, June

the wettest, and August the wettest with the exception of 1887 and 1892, since the record began.

COUPAR ANGUS.—R 1·20 in., and rainy days 11, above the average. January, February, May, July, September and October were dry, and March, June and August were extremely wet, but only on June 15th did the fall exceed an inch. The mean temp. is also high, owing to the warm autumn.

DIVISION XVII.—NORTH EASTERN COUNTIES.

THE BURN.—More than half the total R fell in the four months March, June, August and December, the fall in March (5·58 in.) being quite abnormal. In July and September more than half the total for the month fell in one day.

ELLON, KERMUCK.—Favourable on the whole. From June 20th far through autumn was fine, with more sunshine than usual.

ELLON, MAINS OF WATERTON.—Total R about 4·00 in. below the average of 25 years, the deficiency in July (R ·90 in.) being, perhaps the most unusual feature.

WESTER ELCHIES SCHOOL.—R 4·21 in. less than the average of 19 years. Short spells of dry weather were frequent, the longest being from October 13th to November 12th, with ·12 in. of R.

FORRES, H.R.S.—The smallest R in 22 years; the next to it being 1884, with nearly ·50 in. more.

FORRES, GRANGE HALL.—The smallest R since 1884.

KINLOSS.—A very dry spring, and altogether a small R, the total being nearly seven inches less than the average of four years.

DIVISION XVIII.—NORTH WESTERN COUNTIES.

ROSHVEN.—The last half of October and first half of November were exceptionally fine, and green leaves remained on many trees till the end of November.

LOCHMADDY.—R 2·49 in. less than the average of 14 years. The outstanding features were the almost entire absence of serious wind storms in all but the last month, and the fine weather of the last half of October and the beginning of November.

DRUMNADROCHIT.—R ·22 in. more, and rainy days 12 fewer, than the average of 12 years.

DIVISION XIX.—NORTHERN COUNTIES.

DUNROBIN CASTLE.—R about 8·00 in. below the average, being the least registered in 29 years. The year opened with mild weather; frost and S set in about the 22nd of January, lasting till the middle of February. March was unusually wet, R falling on 25 days, but April was a good seed month. The summer was changeable, but on the whole good. The latter part of the year was mild, only a few days' frost, without S, occurring in the third week of December.

LAIRG.—A rather dry summer, and wells were dried up in July and August.

IRELAND.

DIVISION XX.—MUNSTER.

DUNMANWAY, COOLKELURE.—Believed to be the wettest year recorded, and the last three months the mildest.

CORK, WELLESLEY TERRACE.—R 5·36 in., and rainy days 18, above the average for Cork. Absolute drought prevailed for 18 days ending May 24th. Very little S.

MALLOW, SUMMER HILL.—Abnormally wet, both in continuity and intensity, the total being 6·28 in. more than the average of 7 years. Excessive and continuous R fell at seed-time, when from March 1st to April 21st there were 45 wet, and only 7 fine, days; and during harvest, when from August 4th to September 5th, there were 33 consecutive wet days. Three falls of more than an inch in 24 hours occurred.

WATERFORD, BROOK LODGE.—The wettest year since 1877, the wettest November since 1852, and the wettest March since the record commenced in 1850.

CLONMEL, BRUCE VILLA.—A wet year. R about 4·00 in. more than the average.

BALLINA.—A very wet year, especially March, April, August, November and December.

DERRY CASTLE.—The heaviest R on record; 1883 coming next, with 56·23 in. on 223 days. R 22½ per cent. above, and rainy days 8 more than, the average of 10 years. The heavy R of March and

April is unprecedented; August and November were also extremely wet, while the December R was 27½ per cent. above the average.

CASTLE LOUGH.—The wettest year since 1877, when 50·11 in. fell. March and April were both "record" falls, 5·92 in. and 5·09 in. respectively.

BALLINGARRY, HAZELFORT.—The number of wet days during the three months February to April, and the amount of R during March and April, were so exceptional that farmers were unable to sow their fields or get on with their ordinary spring work; 10·82 in. of R fell on 75 days out of the 89 days. There were 28 consecutive wet days ending March 28th, and 19 wet days ending April 17th.

LIMERICK, ROXBOROUGH.—Said to be the wettest of the last 30 years, and the potato crop failed badly.

CARRIGAHOLT CASTLE.—Particularly wet and windy.

BROADFORD, HURDLESTOWN.—The wettest year on record, with the exception of 1886, when 44·71 in. fell; the R being 10·76 in. above, but the rainy days 1 below, the average of 12 years.

MILTOWN MALBAY.—The greatest R of any year recorded. The temp. of the summer and harvest months kept pretty high, or the effects would have been more disastrous. There were no great storms on this coast. The end of November and whole of December were very inclement, with much T and L.

DIVISION XXI.—LEINSTER.

NEW ROSS, LONGRAIGUE.—R the greatest since 1882, and ex ceeded only five times since 1868.

ENNISCORTHY, BALLYHYLAND.—The greatest R for 15 years.

MONKSGRANGE.—Remarkable as the wettest year of the past five, with the greatest number of rainy days, and the greatest fall in any month, 8·88 in. in August.

GRAIGUE, BRANDONDALE.—R 10·55 in. more than the average of 12 years, and 3·24 in. more than in any other year during that period.

KILKENNY, SION VILLA.—Quite a record year for R, exceeding the average of ten years by fully ten inches. Never were the prospects for harvest brighter than at the end of July, but the R of August (5·67 in. on 24 days) ruined everything.

ABBEY LEIX, BLANDSFORT.—R 9·36 in., and rainy days 29, in excess of the average of 23 years.

STRAFFAN HOUSE.—May and the first half of June were hot and

genial, but the rest of the year, both before and after, was wet, cold and sunless.

DUBLIN, PHŒNIX PARK.—R 2·63 in. more than the average of ten years.

BALBRIGGAN, LARAGH.—R 2·46 in. more than the average of ten years.

ACLARE HOUSE.—The wettest year remembered, with no frost or S to speak of.

CLOONDRA.—R about 5·50 in. above the average, the excess being not so great as at other places on the Shannon.

CURRYGRANE.—The wettest year since observations began in 1879.

DIVISION XXII.—CONNAUGHT.

WOODPARK [SCARIFF].—The wettest year remembered by the oldest inhabitant. March produced a record R (6·55 in.), and was a bitter month, with much H and sleet. Keen N.E. wind from May 8th to 24th, with frost at night and burning sun by day. August was the wettest known.

WOODLAWN.—Very changeable throughout, and at times very cold, even at midsummer; this, with the frosts in May, made a very unfavourable year.

KYLEMORE HOUSE.—Very wet and stormy, with little frost or S.

TUAM, GARDENFIELD.—The wettest year since 1886; R 5·76 in. more than the average of ten years. Spring being the wettest since the record commenced, caused great delay in putting down crops. The summer was also very wet, and the wet August seriously injured corn and potatoes. February, March, April, June, August and December had more than the average R, and the remainder had less.

ATHLONE.—Very wet; R 10·82 in. above the average.

ROOSKY.—R 10·61 in. above the average.

CONG, THE GLEBE.—R fell in large quantities all through the year. Eleven consecutive days in May was the longest dry period.

BALLYMOTE, NEW PARK.—The wettest year on record. The excessive number of rainy days in March and April (39), followed by a wet summer, produced a state of things very trying to the farmer, and disastrous to the potato crop.

JAMESTOWN, ALBERT LOCK.—The R was not so great as at other stations along the Shannon, but exceeded the average by 5·19 in.

LAWDERDALE.—A very wet year; the R exceeding the average of ten years by 11·32 in., and the wettest year of that period by 6·66 in.; while the rainy days exceeded the average by 15. March, April, June, August and December were all abnormally wet.

LOUGH ALLEN.—March, April, June, August and December were very wet, and the total for the year exceeded the average by 8·98 in.

DIVISION XXIII.—ULSTER.

STRADONE HOUSE.—The wettest for a great number of years.

BELTURBET, CLOVERHILL.—There was frequent S and some sharp frost at the end of January, but none occurred in February, and the last week was very warm. March and April also were free from frost, but the ground was cold and wet. May, when wet, was cold, and when dry, there were harsh winds and bright sun. June, July and August had much R and many wet days. October, November and December were mild.

DARTREY.—The coldest, and one of the wettest, years remembered.

LURGAN, BELLE VUE.—Total R ·23 in. more than the average of 16 years. July was exceptionally dry, with a deficiency of 2·17 in. The autumn was rather drier than usual, September, October and November being considerably below the average; on the other hand, the first six months had half the total R, an unusually large proportion.

BALLYNURE, BALLYBOLEY.—Low temp. and much R in June, July and August, and light rains in September and October.

BALLYMENA.—January and July were the driest months, and August was the wettest. The greatest daily R occurred on June 15th.

STEWARTSTOWN.—R, and number of rainy days, above the average.

OMAGH, EDENFEL.—The wettest year of the 34 recorded here; but though the two wettest months—March, with 5·44 in., and June, with 7·41 in.—are usually the most critical from an agricultural point of view, they were so speedily followed by favourable weather, and the average temp. of the year was so well maintained, that the crops on the whole were a good average.

RAPHOE, CONVOY HOUSE.—The early summer was ungenial, June being very wet; but the autumn was very fine and the harvest good. The later months were the mildest remembered. Scarcely any T, and no heavy gales.

HEAVY FALLS IN SHORT PERIODS IN 1897.

As far as we are aware, this subject has not been dealt with in any country except our own, and though hope is always promising us the pleasure of thoroughly working up the mass of records printed in our back volumes, the time to do so never comes. We did something in this direction about ten years back (*See* Intense Rains, 1879 to 1888, in *British Rainfall*, 1888, p. 32), and reference to that article, and to a few conclusions based upon a short examination of the tables (similar to that on pages [112–113]) for the years 1888 to 1897, will not merely be instructive themselves, but will also bring out the exceptional features of 1897.

In dealing with this subject, we evidently need to consider only falls which are unusual, and the very first step is to decide what is "unusual"; for ·10 in. to fall in a day is obviously common, for it to fall in an hour also is common, but for it to fall in 5 minutes, what would our readers say to that? It also is quite common, and it is only when it falls in less than 3 minutes that it becomes worthy of mention. Similarly, for an inch to fall in a day is common, for it to fall in an hour is worthy of record, for it to fall in half-an-hour is scarcely exceptional, but it is rare for it to fall in less than 20 minutes, though there are, perhaps, 20 such cases on record, and there is one (rather doubtful) case in 1893 of 1·25 in. in 5 minutes, and we ourselves in London measured (in 1878) 1·00 in. in 9 minutes 36 seconds.

These remarks show that every heavy fall must be regarded in the double aspect of its amount and its duration; but even the computed rate per hour, which apparently would enable the records to be readily compared, will not suffice; because a rate of (say) 3·00 in. per hour, which if it continued for two hours would be unprecedented, would not be noteworthy unless it lasted more than (say) 20 minutes.

The question being thus rather complex, we have for years

adopted a graduated scale for the exclusion of unimportant records, which scale is shown by the shaded portion of the accompanying diagram. Roughly, this treats as unworthy of record all falls of less than 0·50 in. in 30 minutes, less than 0·70 in. in 1 hour, or less than ·85 in. in 2 hours.

For rains to be really remarkable and noteworthy they must be much greater than this, and these have to exceed a second curve on the diagram which gives as the minimum limit rather more than double the above values, viz., 1·10 in. in 30 minutes, 1·75 in. in 1 hour, and 2·10 in. in 2 hours.

Now, if we look at the table on the following pages, we shall find that there were in 1897 15 instances of falls above this limit. We have gone back nearly 20 years, and can find no previous year with so many exceptionally intense rains. The number of instances seem to have been :—

1879..... 6	1884..... 4	1889..... 7	1894..... 5
1880..... 4	1885..... 2	1890..... 1	1895..... 12
1881..... 2	1886..... 5	1891..... 4	1896..... 5
1882..... 2	1887..... 1	1892..... 7	1897..... 15
1883 6	1888..... 10	1893..... 12	

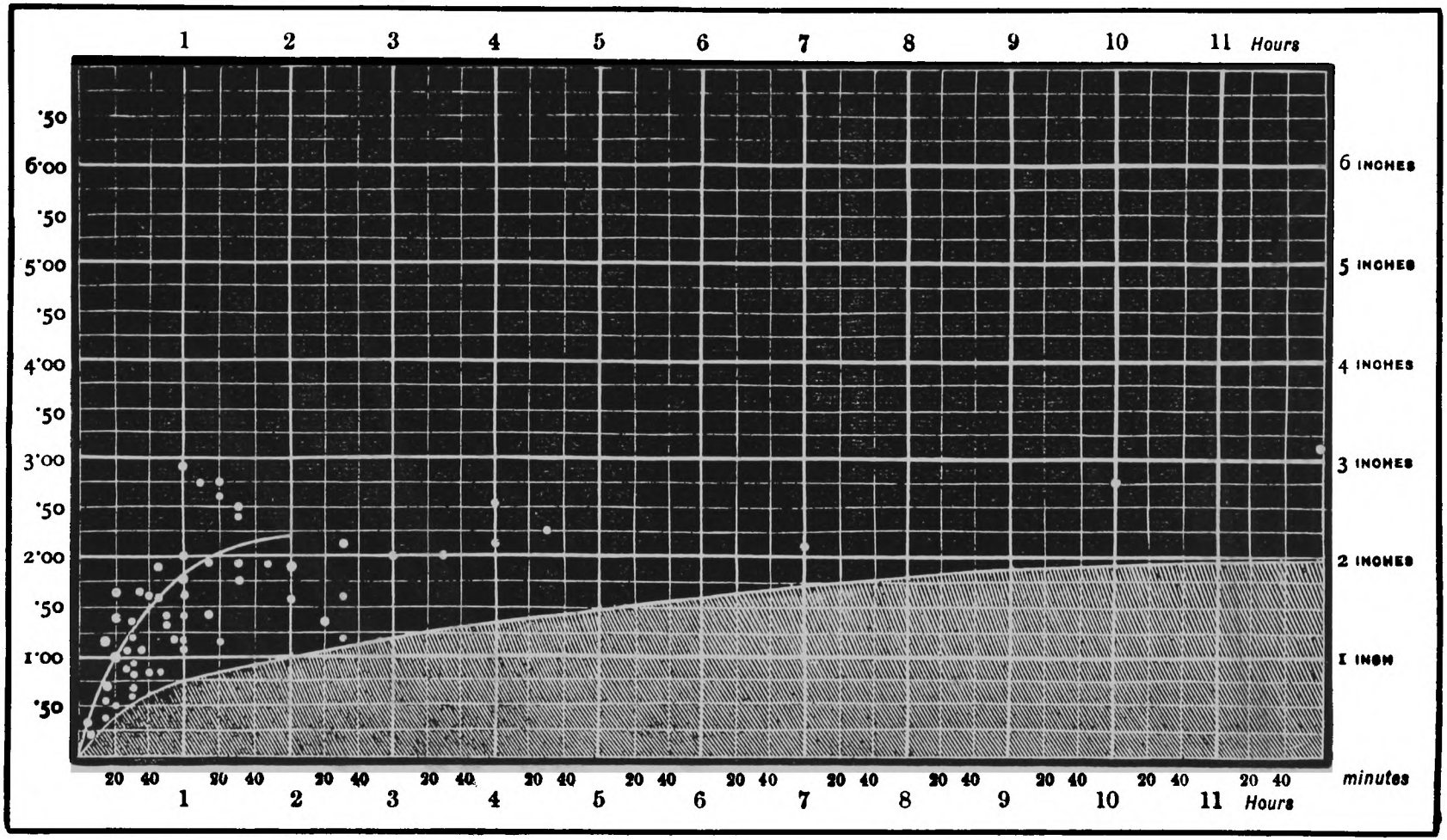
It is true that inasmuch as the number of records which we have received for 1897 largely exceeds that for 1879, the figures are not strictly comparable, but even if we double the early numbers, they will not come up to the 15 for 1897. So that, indisputably, 1897 has been a year in which rains of high intensity have been more frequent than they generally are.

The falls of 1·65 in. in 20 minutes at Luton, and of 2·95 in. in an hour at Bishops Hill (although both have been surpassed) are records which well illustrate the difficulties of dealing with storm water in sewering towns.

Heavy Falls in Short Periods in 1897.

Date.	Div.	Station.	Amount.	Duration.		Rate per hour.
			in.	hr.	min.	in.
May 30 ...	IV.	Colchester, Lexden	·19	...	3	3·80
,, ,, ...	II.	Crowborough, The Observatory	·30	...	4	4·50 x
Aug. 25 ..	I.	Camden Square	·20	...	7	1·71
Sept. 1 ...	,,	,, ,, ...	·21	...	8	1·58
May 30 ...	II.	Wadhurst, Low Cousley Wood	·20	...	10	1·20
,, 31 ...	XXII.	Tuam, Gardenfield.....	·20	...	10?	1·20?
Aug. 30 ...	III.	Addington	·20	...	10	1·20
June 24 ...	IV.	Chelmsford, Spergula	1·14	...	15	4·56 x
,, 26 ...	II.	Hastings, Guestling Rectory..	·74	...	15	2·96
Apr. 28 ...	VI.	Ledbury, Putley Court.....	·52?	...	15?	2·08?
Aug. 26 ...	XI.	Abergwesyn Vicarage	·51	...	15	2·04
June 27 ...	II.	Lewes, Saxonbury	·50	...	15	2·00
,, 6 ...	,,	Oxshott	·48	...	15	1·92
May 30 ...	XI.	Haverfordwest	·35	...	15	1·40
June 16 ...	XIII.	Edinburgh, Blacket Place ...	·44	...	16	1·65
Aug. 6 ...	V.	Otterford, Otterhead..	·46	...	17	1·62
June 24 ...	III.	Luton, Pumping Station	1·65	...	20	4·95 x
,, ,, ...	,,	Marlow Mills	1·40	...	20?	4·20?x
,, ,, ...	IV.	Chelmsford, High Street	1·37	...	20	4·11 x
,, 6 ...	II.	Bickley, Elmhurst.....	1·00	...	20	3·00 x
,, 24 ...	IV.	Hatfield Peverel.....	·92	...	20	2·76 x
,, ,, ...	,,	Fingringhoe.....	·68	...	20	2·04
Apr. 28 ...	V.	Devizes, Wilts Co. Asylum ...	·50	..	20	1·50
June 24 ...	IV.	Writtle, Melbourne	1·08	...	25?	2·59?x
,, ,, ...	,,	Danbury Rectory	·83	...	26	1·92
,, ,, ...	,,	Writtle, Little Boyton	1·34	...	30	2·68 x
,, 6 ...	II.	Sidcup, Hatherley Road	1·23	...	30	2·46 x
,, ,, ...	,,	Bromley, Widmore Road.....	1·10	...	30	2·20
,, 24 ...	,,	Maidenhead, Castle Hill House	·98	...	30	1·96
,, ,, ...	,,	Pirbright Camp	·93	...	30	1·86
Aug. 5 ...	X.	Penrith, Greystoke	·88	...	30	1·76
June 5 ...	XI.	Dowlais, Gwernllwyn	·81	...	30	1·62
Aug. 25 ...	II.	Hastings, Hollington.....	·80	...	30	1·60
June 28 ...	VIII.	Gateacre, The Nook	·68	...	30?	1·36?
July 20 ...	V.	Kingskerswell, Fluder	·66	...	30	1·32
Aug. 5 ...	VIII.	Rochdale, Fieldhead	·56	...	30	1·12
June 24 ...	II.	Weybridge, Field Place	1·65	...	35?	2·83?x
Aug. 7 ...	VI.	Redditch, Prospect Hill	1·09	...	35	1·87
June 24 ...	I.	Trent Park	1·09	...	35?	1·87?
Aug. 5 ...	VIII.	Rochdale, Deeplish Hill	1·60	...	40	2·40 x
,, ,, ...	IV.	Sudbury, Friars Street	·79	...	40?	1·19?
Sept. 29 ...	III.	Newport Pagnell	1·89	...	45?	2·52?x
Aug. 5 ...	VIII.	Rochdale, Fieldhead	1·54	...	45	2·05 x
June 6 ...	II.	Chislehurst, Foxbury	1·53	...	45?	2·04?x
July 20 ...	V.	Polapit Tamar.....	·84	...	45	1·12
Aug. 5 ...	IX.	Austwick, Crow Nest	·78	...	45	1·04
June 24 ...	II.	Swarraton Rectory	1·42	...	50	1·70
Aug. 5 ...	VIII.	Rochdale, Park Observatory..	1·31	...	50	1·57
July 21 ...	II.	Farringdon, The Elms	1·20	...	55	1·31
,, ,, ...	IV.	Ipswich, Bishop's Hill	2·95	1	0	2·95 x
,, 20 ...	VI.	Stroud, Stanley Park	2·00?	1	0	2·00?x

HEAVY FALLS IN SHORT PERIODS.



The shaded portion represents falls too numerous to require insertion; the short white curve, extremes rarely exceeded.

Heavy Falls in Short Periods in 1897—continued.

Date.	Div.	Station.	Amount.	Duration.		Rate per hour.
			in.	hr.	min.	in.
June 24 ...	I.	Perivale	1·78	1	0	1·78 x
July 21 ...	IV.	Ipswich, Belstead Hall.....	1·76	1	0	1·76 x
,, 20 ...	VI.	Stroud, Upfield	1·62	1	0	1·62
June 24 ...	I.	Ealing, Public Buildings	1·40	1	0	1·40
Aug. 5 ...	II.	Otterbourne W.W., Shawford	1·21	1	0	1·21
Apr. 27 ...	,,	Clapham Park.....	1·18	1	0	1·18
July 20 ...	III.	Oxford, St. Giles	1·14	1	0	1·14
Aug. 25 ..	I.	Acton, Newburgh Road	1·11	1	0	1·11
,, 20 ..	V.	Harptree Court	1·08	1	0	1·08
Apr. 28 ...	VI.	Salt Vicarage	1·04	1	0	1·04
July 20 ...	V.	Chudleigh, Torquay W.W....	2·75	1	10	2·36 x
Aug. 5 ...	VIII.	Rochdale, Park Observatory..	1·93	1	15	1·54 x
June 24 ...	I.	Ealing, Gordon Road.....	1·40	1	15	1·12
July 20 ...	V.	Warminster, Rye Hill	2·75	1	20	2·06 x
June 30 ...	IX.	Tickhill	2·60	1	20	1·95 x
Aug. 5 ...	X.	Grasmere, Pavement End.....	1·16	1	20	·87
July 26 ...	III.	Southgate, The Lawns	2·50	1	30	1·67
June 24 ...	II.	Weybridge, Heath Field	2·40	1	30	1·60
Sept. 29 ...	III.	Stretham Ferry	1·90	1	30	1·27
June 24 ..	I.	Harrow Weald	1·84	1	30	1·23
July 26 ...	VII.	Little Ponton Rectory	1·75	1	30?	1·17?
June 24 ...	II.	Surbiton, Vronvelin	1·96	1	45	1·12
July 21 ...	I.	Crouch End, Fairfield Road...	1·90	2	0	·95
Aug. 25 ...	II.	Hastings, Hollington.....	1·89	2	0	·95
June 24 ...	,,	East Molesey	1·55	2	0	·78
July 20 ...	V.	Polapit Tamar.....	1·29	2	20	·55
,, 21 ...	I.	Finsbury Park	2·10	2	30	·84
,, ,, ..	VI.	Bodenham Vicarage	1·61	2	30	·64
Aug. 8 ...	,,	West Bromwich.....	1·20	2	30	·48
July 21 ...	I.	Crouch End, Aubrey Road ...	2·00	3	0	·67
June 26 ...	XI.	St. Martin's, Les Blanches ...	2·01	3	30	·57
July 21 ...	I.	Finsbury Park	2·53	4	0	·63
Sept. 29 ...	IV.	Hillington School	2·12	4	0	·53
Aug. 8 ...	III.	Fawsley	2·25	4	30	·50
,, ,, ...	VI.	West Bromwich	2·07	7	0	·30
,, ,, ...	III.	Fawsley	2·75	10	0	·28
,, 30 ...	VI.	Clifton, Royal York Crescent	3·12	12	0?	·26?
,, ,, ...	,,	Bristol Docks	3·09	14	0	·22
June 16 ...	XIV.	Lochwinnoch, Garthland	3·29	19	0	·17
Dec. 29 ...	V.	Torquay, Cary Green	2·49	21	0	·12
June 15–16	XVI.	Blairingone Manse.....	2·53	22	0	·12

HEAVY FALLS ON RAINFALL DAYS IN 1897.

FOR more than thirty years there has not been one in which the facts to be reported under this head have been so striking as they were in 1897.

But we must not anticipate. Our first duty is to explain precisely with what this section deals, and what information it gives. From each of 2598 stations we have received a statement of the largest amount of R measured for any one rainfall day, the date on which it occurred, and the total rainfall for the year. From these data we have computed what per centage this largest fall (described for brevity by the symbol M = Maximum daily fall) was of the yearly total. This is necessary, because obviously a fall of say 3 inches is a much more common occurrence at a station where the total fall is 100 inches, than at one where it is 25 inches, and this is directly shown by the percentage, which at the former would be 3, at the latter 12. We have, therefore, to regard each M from the two points of view : its amount and its percentage.

Moreover, it would be impracticable and wearisome to print all the 2598 M, and so for many years past we have selected, for printing in full, only M which either exceed $2\frac{1}{2}$ inches in amount, or which exceed $7\frac{1}{2}$ per cent. of the yearly total. This generally keeps down the number to be published to about 100, which suffices to give a good general idea of the important M, both as to their amount and as to their geographical distribution. This year, however, there are nearer 200 such entries. Moreover, it has been found best to further divide the statement into (1) a chronicle, which enables us to point out the leading features of the great M of the year ; and (2) an abstract, in which the broad general features are compared with previous years.

PART I.—CHRONICLE.

FEBRUARY 25TH.

XVIII.	Fort William, Ardtraigh.....	2·91	in.	or 3·7	per cent.
,,	Glenquoich	2·65	,,	2·5	,,
,,	Scalpay Island	3·26	,,	4·4	,,

JUNE 6TH.

II.	Beckenham, Cedars Road	1·86 in.	or 7·7 per cent.

Due to a TS in the neighbourhood of Beckenham, Bromley and Chislehurst.

JUNE 16TH.

XIV.	Lochwinnoch, Garthland	3·29 in.	or 5·1 per cent.
XV.	Holy Island, Lamlash	2·60 ,,	4·8 ,,

JUNE 24TH.

I.	Hampton, Southwark Water Works..	1·70 in.	or 7·8 per cent.
,,	Harrow	2·24 ,,	8·6 ,,
II.	Weybridge, Field Place	2·35 ,,	9·6 ,,
,,	,, West Oaks	3·15 ,,	12·0 ,,
,,	,, Heathfield	2·45 ,,	9·8 ,,
,,	Esher, Sewage Works	2·32 ,,	9·0 ,,
,,	Surbiton. Seething Wells	2·12 ,,	8·7 ,,
,,	West Molesey	1·96 ,,	8·1 ,,
,,	Thames Ditton, The Hollies, Giggs Hill	1·95 ,,	7·9 ,,

The date of the great Essex wind and H storm, but the above were unconnected with it, and due to a TS in north Surrey in the evening.

JUNE 28TH.

VIII.	Gateacre, The Nook.....	2·61 in.	or 7·5 per cent.

TSS prevalent over central and northern England, but no other entry is of sufficient importance to be inserted.

JUNE 30TH.

IX.	Tickhill	2·76 in.	or 13·0 per cent.

Due to a TS; there were few except in Yorkshire.

JULY 20TH.

II.	Rotherwick, Tylney Hall	2·47 in.	or 9·3 per cent.
V.	Warminster, Rye Hill.....	2·77 ,,	6·7 ,,
,,	Chudleigh, Torquay W. W.	3·02 ,,	5·9 ,,
VI.	Stroud, Stanley Park	2·73 ,,	7·9 ,,
X.	Alnwick Castle.....	2·75 ,,	8·7 ,,
,,	Howick	2·37 ,,	8·6 ,,

TSS in most parts of England, but the above are the only important M.

JULY 21ST.

I.	Finsbury Park, New River Works ...	2·53 in.	or 8·9 per cent.
,,	Stoke Newington, Cazenove Road.....	3·18 ,,	11·4 ,,
,,	Crouch End, Fairfield Road	2·09 ,,	7·7 ,,
II.	Rochester, Abbots Court, Hoo	1·69 ,,	7·8 ,,
III.	March, Stags Holt	2·15 ,,	9·2 ,,
IV.	West Ham, Abbey Mills.....	1·87 ,,	8·4 ,,
,,	Langham Rectory.....	1·70 ,,	7·8 ,,
,,	Ipswich, Belstead Hall	1·76 ,,	7·9 ,,
,,	,, Bishops Hill	2·95 ,,	12·7 ,,
,,	,, Clare Lodge	1·86 ,,	7·8 ,,

Sharp TSS, especially in North London and at Ipswich.

JULY 22ND.

VII.	Boston, Grand Sluice	2·17	in. or	8·9	per cent.

Very local; in different parts of Boston the fall was ·66, 1·26, 1·36, and 1·80 inch, and four miles away no rain fell.

JULY 26TH.

I.	Whetstone	2·26	in. or	8·4	per cent.
III.	Southgate, The Lawns	2·57	,,	9·0	,,

TSS, chiefly in a belt reaching from South Gloucestershire to Norfolk.

AUGUST 5TH.

VIII.	St. Helens, Victoria Park	2·58	in. or	7·7	per cent.
,,	Rochdale, Park Observatory	3·24	,,	6·7	,,
IX.	Malham Tarn	2·90	,,	4·6	,,
,,	Arncliffe Vicarage	2·75	,,	4·0	,,
,,	Oughtershaw Hall	2·62	,,	3·4	,,

TSS from Hampshire to Caithness, but heaviest R in Lancashire and West Yorkshire.

AUGUST 8TH.

III.	Daventry, Fawsley	2·62	in. or	9·8	per cent.
,,	Tydd St. Giles	1·88	,,	7·8	,,
VI.	Walsall, Sewage Farm	2·39	,,	8·4	,,
,,	,, Wednesbury, Sewage Farm.	2·36	,,	9·2	,,
,,	,, ,, Ocker Hill ..	2·29	,,	9·4	,,
,,	Bloxwich, Sneyd Reservoir	2·33	,,	9·0	,,
,,	Hammerwich, Cannock Chase Res.	2·23	,,	8·3	,,
,,	Hednesford	2·11	,,	8·3	,,
,,	Stourbridge, Pedmore	2·17	,,	7·9	,,

TSS from Surrey to Stafford, but apparently heaviest in the south of the latter county.

AUGUST 24TH.

IV.	Stradbroke Rectory	1·75	in. or	7·8	per cent.

Unimportant local TSS on this day, chiefly in Suffolk.

AUGUST 26TH.

IX.	Middleton-in-the-Wolds	1·78	in. or	7·6	per cent.

Small TSS, chiefly in the E. Riding of Yorkshire, between Hull and Scarborough.

AUGUST 30TH.

V.	Yatton, Chelvey	3·25	in. or	7·9	per cent.
,,	Long Ashton Estate Office	3·59	,,	9·2	,,
,,	Bristol, Coronation Road	2·79	,,	7·8	,,
,,	Wraxall	3·03	,,	7·5	,,
VI.	Bristol Docks, Underfall Yard	3·12	,,	8·6	,,
,,	,, Small Street	3·25	,,	8·4	,,
,,	Clifton, Royal York Crescent	3·12	,,	8·0	,,

A very steady, heavy R, not a TS, from about 6 p.m. on 30th to 9 a.m. on 31st; heaviest in early morning.

SEPTEMBER 1ST.

XI.	Douglas, Victoria Road	2·83	in. or	6·3	per cent.
,,	,, Cronkbourne	2·72	,,	6·1	,,
XXI.	Greystones, Knockdolian	2·70	,,	6·3	,,

Heavy R, without T or L, over the S.E. of Ireland and the Irish Channel.

SEPTEMBER 25TH.

XVIII.	Loch Torridon, Bendamph	3·50	in. or	4·2	per cent.

A local R, chiefly confined to Rossshire.

SEPTEMBER 29TH.

II.	Little Wittenham Rectory	1·82	in. or	8·0	per cent.
III.	Dorchester, Bishops Court	1·78	,,	7·6	,,
,,	St. Neots, Great Paxton	1·98	,,	8·7	,,
,,	Offord D'Arcy	1·91	,,	8·1	,,
,,	St. Ives, The Priory	1·78	,,	7·8	,,
,,	Granchester Mill	1·90	,,	8·0	,,
,,	Cambridge, Sidney Street	1·99	,,	9·6	,,
,,	,, Pinehurst	1·78	,,	8·2	,,
,,	,, Holm Leigh	1·75	,,	8·4	,,
,,	,, Trinity College	1·77	,,	8·3	,,
,,	Ely, Stretham	1·40	,,	8·4	,,
,,	,, ,, Ferry	1·90	,,	9·1	,,
,,	Chatteris, Aylesby House	2·02	,,	9·5	,,
,,	,, The Priory	2·00	,,	9·1	,,
,,	,, Horseway Lock	2·40	,,	14·1	,,
,,	Stanground Sluice	1·73	,,	9·1	,,
,,	Upwell, Marmont Priory Lock	2·00	,,	10·5	,,
,,	,, Euximoor House	2·37	,,	10·9	,,
IV.	Denver	2·55	,,	10·7	,,
,,	Outwell Sluice	2·15	,,	10·0	,,
,,	Wiggenhall, Outlet Syphons	1·96	,,	8·0	,,
,,	Hillington Rectory	2·12	,,	8·1	,,
,,	,, School	2·12	,,	8·1	,,
,,	Dersingham Vicarage	2·18	,,	8·9	,,

TSS prevailed over large portions of the S. of England; the R was not remarkably heavy, but as the largest amounts fell at dry stations some of the per centages are unusually high, higher than on any other day in the year.

OCTOBER 15TH.

XV.	Lock Eck, Benmore	2·54	in. or	2·8	per cent.

This entry is in no way remarkable (as is shown by the small per-centage), but being just over $2\frac{1}{2}$ inches, it is entitled to insertion.

NOVEMBER 12TH.

VIII.	Cartmel, Broughton Hall	2·90	in. or	5·3	per cent.
,,	Colton	3·82	,,	6·0	,,
,,	Finsthwaite Vicarage	2·81	,,	4·4	,,
,,	Blawith	2·92	,,	4·5	,,
,,	Cartmel Fell Vicarage	3·91	,,	6·0	,,
,,	Duddon Valley, Seathwaite Vicarage.	4·07	,,	4·4	,,
,,	Esthwaite Lodge	4·22	,,	5·6	,,
,,	Monk Coniston Park	2·84	,,	2·8	,,
,,	Skelwith Fold [Ambleside] (No. 1)	6·03	,,	6·5	,,
X.	Seathwaite	8·03	,,	5·6	,,
,,	Borrowdale Vic., Rosthwaite	6·94	,,	5·8	,,
,,	Buttermere, Hassness	4·68?	,,	3·9?	,,
,,	Borrowdale, Grange	5·93	,,	5·7	,,
,,	Keswick, Barrow House	3·98	,,	4·7	,,
,,	,, Deer Close	2·77	,,	3·9	,,
,,	Cockermouth, Ullock	4·44	,,	7·8	,,
,,	,, Whinfell Hall	3·34?	,,	6·2?	,,
,,	,, Fairfield, Lorton	3·34	,,	6·1	,,
,,	,, Brandlingill	4·12+	,,	6·6+	,,
,,	,, Broughton Grange	2·53	,,	5·4	,,
,,	Maryport, Gilcrux	2·73	,,	5·5	,,
,,	Kendal, Kent Terrace	2·85	,,	5·2	,,
,,	,, Holmcroft	2·73	,,	5·0	,,
,,	,, Hawesmead	3·05	,,	5·6	,,
,,	,, Helm View	2·85	,,	5·0	,,
,,	,, Ellergreen	3·35	,,	5·2	,,
,,	Ambleside, Skelwith Bridge	6·35	,,	6·3	,,
,,	,, Gale House	4·70	,,	5·5	,,
,,	Elterwater, Birch Hill	4·57	,,	4·4	,,
,,	Ambleside, Lesketh Howe	4·45	,,	5·1	,,
,,	Grasmere, High Close	4·33	,,	4·5	,,
,,	Dungeon Ghyll	5·90	,,	4·6	,,
,,	Grasmere, Pavement End	4·38	,,	4·1	,,
,,	Orton Vicarage	2·98	,,	4·6	,,
,,	Shap, Hill Field	2·66	,,	4·3	,,
,,	Patterdale Hall	4·55	,,	4·6	,,

This was one of the heaviest rains on record in the United Kingdom. At Seathwaite, in Borrowdale, the fall in the 24 hours ending 9 a.m. on the 13th was 8·03 in., being more than half-an-inch greater than any other record during fifty-three years. As a matter of curiosity we have computed what the fall during those 24 hours was upon The Stye. The gauges there are read only on the first of each month, so that there is no actual record, therefore we have computed it, assuming that the fall on that day was the same proportion (38½ per cent.) of the monthly total that it was at Seathwaite. On that assumption, we obtain the following startling values, and we see no reason to doubt their accuracy, although of course not having

been actually measured, we cannot put them into our tables. The values are—

Gauge A	11·12 in.	Gauge C	11·60 in.
,, B	11·54 ,,	,, D	9·23 ,,

We cannot induce observers to believe 4-inch rains to be possible. Rule XVI. seems ridiculous to those who rarely have to record more than an inch, or an inch and a half, and therefore, though the rule puts 4 inches as the minimum, and 6 inches as the desirable, capacity for even the driest station, too many observers ignore it, and when a really great rain comes some one is sure to fail. There is no such failure at any of our very wet stations this year, but there are some at stations of moderate fall. At the wet stations the only failure is one which apparently could not have been anticipated. At Hassness, Buttermere, the rain gauge is in the ornamental gardens just above the head of the Lake. The observer read the gauge at 5 p.m. and measured 2·68 in.; during the night a beck (stream) close by overflowed and flooded and filled the gauge. The observer was (naturally) much troubled by the event, and has computed the fall (in the same proportion as other stations) during the other 16 hours as 2·10 in., making in all 4·78 in. We greatly object to having to fall back upon a calculation, but feel sure that if the total of 4·78 in. errs, it is by being too small; and it seems a pity to break up a 12 years' record for the sake of an uncertainty of a few tenths of an inch. We have therefore let it stand, but marked it with a ?

The other cases are more unsatisfactory, because, if the observers had but emptied their gauges in the afternoon, no mischief would have occurred. Both stations are in the vicinity of Cockermouth, which is not a very wet place, and the totals with which the observers had to deal were considerably under five inches, but both at Brandlingill and at Whinfell Hall the gauges were allowed to run over. At Brandlingill 4·12 in. was measured, but the gauge was found to be overflowing. We have considered all the facts (and there are four gauges within as many miles), and *think* that the overflow must have been, as the observer says, "very trifling"; we have let the record stand, marking it with a + to denote overflow. The other case is more difficult and very important, owing to the great length (43 years) of the Whinfell Hall record. The gauge holds only 2·58 inches, and in heavy rains is usually emptied twice on wet days. We sympathize with our venerable correspondent's

annoyance at the oversight. Fortunately, there is within a mile another observer whose gauge will hold nine inches, and he collected only 3·34 in. Mr. Robinson has adopted the same amount for Whinfell Hall, and we see no reason to suggest any alteration.

Now we can proceed with our remarks upon the table. The exceptional phenomena are shown to have been confined to the English Lake District, and not even to have covered the whole of it; *e.g.*, Keswick was almost the north-eastern boundary, and 2·66 in. at Shap is in no way remarkable, neither was there any R of importance on the West coast of Cumberland. The greatest intensity seems to have been over a belt stretching N.W. from Ambleside, over the Langdales (5·9 in.), Seathwaite and the Stye (8 to 12 inches), Buttermere (5 inches), Crummock Water, and the river Cocker (4 inches).

NOVEMBER 17TH.

XI.	Bl. Ffestiniog, New Welsh Quarry ...	4·16 in.	or 3·6	per cent.
,,	Rhiwbryfdir=Oakley Quarries.....	3·21 ,,	3·2	,,

Heavy M in the vicinity of Snowdon, exceptionally important because they followed nearly similar falls on the 12th, the day of the great Borrowdale R. It may be well to give here the daily fall at the New Welsh Slate Quarry for the week ending with the 17th :—

11th.	12th.	13th.	14th.	15th.	16th.	17th.	Total.
·50 in.	4·05 in.	·50 in.	·51 in.	·00 in.	1·63 in.	4·16 in.	= 11·35 in.

NOVEMBER 30TH.

XI.	St. Asaph, Nantllys.....	1·82 in.	or 7·7	per cent.
,,	Llandudno, Warwick House	2·43 ,,	7·9	,,

M at a few stations in N. Wales, but only noteworthy at the above.

DECEMBER 7TH.

XI.	Neath, Glyncorrwg	3·17 in.	or 3·3	per cent.

A wet day at most stations in South Wales, but at almost all, except in the S.W. of Glamorganshire, the fall was exceeded by that on the 29th.

DECEMBER 26TH.

XV.	Ardgour House.....	2·70 in.	or 3·8	per cent.
XVIII.	Moidart, Roshven, Glenmutchkin ...	2·74 ,,	3·5	,,

The above are the only M of any importance, but it was the M at many stations in the W. of Scotland and in the northern half of Ireland.

DECEMBER 29TH.

V.	Hazelbury Bryan Rectory	2·60 in.	or 6·2	per cent.
,,	Buckfastleigh, Bossel Park	3·18 ,,	5·0	,,
,,	Sheepstor, Burrator	2·70 ,,	4·6	,,
,,	,, Head Weir	2·57 ,,	4·4	,,
,,	Dartmoor, Deancombe Farm	2·68 ,,	4·5	,,
,,	Ashburton, Holne Vicarage	3·85 ,,	6·2	,,
,,	,, Druid House	3·60 ,,	6·4	,,
,,	Ilsington, Middlecott House	2·83 ,,	5·2	,,
,,	Bovey Tracey, Colehays	3·63 ,,	6·7	,,
XI.	Tredegar, The Willows	3·38 ,,	4·5	,,
,,	Mountain Ash, Maesydderwen	3·50 ,,	5·1	,,
,,	Treherbert, Bute Colliery	4·35 ,,	4·1	,,
,,	,, Tyn-y-waun	4·09 ,,	4·1	,,
,,	Rhondda, Castle-nos Res.	3·07 ,,	3·8	,,
,,	Aberdare, The Mardy	3·06 ,,	4·4	,,
,,	,, Abernant	4·08 ,,	5·9	,,
,,	Dowlais, Gwernllwyn	3·30 ,,	5·2	,,
,,	Nanthir Res. [Aberdare]	4·07 ,,	6·0	,,
,,	Taff Fechan, Pentwyn Res.	2·95 ,,	3·9	,,
,,	Cardiff W.W., Cantreff Res.	3·34 ,,	4·2	,,
,,	,, Cwm Taff Fawr, No. 6	3·36 ,,	3·7	,,
,,	Taff Fechan, Neuadd Res., No. 4	3·03 ,,	3·4	,,
,,	Crickhowell, Glanusk Park	2·66 ,,	5·0	,,
,,	Llanfrynach, Tymawr	2·59 ,,	5·2	,,

This was the M over an area which reached eastwards as far as Southampton, and north as far as Bridgnorth, but which may be said to have had two *foci*, one on Dartmoor in Devonshire, and the other in the north of Glamorganshire and the south of Brecknockshire. This was a winter R, but, in incidence and in amount, it seems to have closely resembled the great fall of July 14th, 1875, although on that occasion six stations had falls exceeding (4·35 in.) the highest in the above table. There may have been, within the large area covered on December 29th, small districts in which heavier TS rains have occurred, and we have just shown that only three weeks previous, the fall of December 29th was exceeded in parts of Glamorganshire, but, taken as a whole, we do not remember a heavier fall between 1875 and 1897.

PART II.—ABSTRACT.

A few pages back, we said that the M of 1897 are without precedent since tables of the character which we are considering have been prepared; and inspection of Tables I. and II. will prove it. Table II. (which is an abstract of Table I.) shows that the average of the 16 M

is 5·24 in., which is 1·56 in. (or 40 per cent.) above the mean for 32 years, and 0·23 in. above the maximum in any previous year. The absolute M of 8·03 in. at Seathwaite is considerably above the greatest fall in any one day of which the daily records for that station have been preserved.

Tables III. and IV. show that the percentages also were high, but not extremely so.

This is confirmed by Table V., which is based upon 2,598 yearly records for 1897, and from it we see that both percentages and M were rather below the average.

Table VI. tells a similar story, it shows that there were somewhat fewer falls of 2·00 in. and upwards than usual, but that relatively there were more falls of 3·00 in. and upwards.

All these statements accord with the obvious fact that the great rainfall in the Lake District on November 12th, though covering only a small area, was so heavy as to usurp almost the whole of Table I.

TABLE I.—*Maximum Falls in* 1897.

Date.	Div.	Station.	Depth.	Per Cent.	Total.
Nov. 12 ...	X.	Seathwaite	8·03in.	5·6	144·19 in.
,, ,, ...	,,	Rosthwaite	6·94 ,,	5·8	120·07 ,,
,, ,, ...	,,	Ambleside, Skelwith Bridge	6·35 ,,	6·3	100·64 ,,
,, ,, ...	VIII.	Skelwith Fold [Ambleside].	6·03 ,,	6·5	93·47 ,,
,, ,, ...	X.	Borrowdale, Grange	5·93 ,,	5·7	104·21 ,,
,, ,, ...	,,	Dungeon Ghyll	5·90 ,,	4·6	127·42 ,,
,, ,, ...	,,	Ambleside, Gale House.....	4·70 ,,	5·5	86·08 ,,
,, ,, ...	,,	Buttermere, Hassness	4·68 ,,?	3·9?	118·78 ,,?
,, ,, ...	,,	Elterwater, Birch Hill	4·57 ,,	4·4	104·76 ,,
,, ,, ...	,,	Patterdale Hall	4·55 ,,	4·6	99·24 ,,
,, ,, ...	,,	Ambleside, Lesketh Howe..	4·45 ,,	5·1	87·65 ,,
,, ,, ...	,,	Cockermouth, Ullock.....	4·44 ,,	7·8	57·06 ,,
,. ,, ...	,,	Grasmere, Pavement End...	4·38 ,,	4·1	106·49 ,,
Dec. 29 ...	XI.	Treherbert, Bute Colliery...	4·35 ,,	4·1	107·31 ,,
Nov. 12 ...	X.	Grasmere, High Close	4·33 ,,	4·5	96·28 ,,
,, ,, ...	VIII.	Esthwaite Lodge.....	4·22 ,,	5·6	75·01 ,,

TABLE II.—*Comparison of Maximum Falls with those in previous years.*

	MEAN.			ABSOLUTE.			
Years.	Depth.	Per Cent.	Mean total fall at these stations.	Depth.	Per Cent.	Station.	Division.
	in.		in.	in.			
1865 ...	3·67	6·4	61·8	6·41	5·5	Seathwaite.....	X.
1866 ...	3·40	—4·4	86·2	6·38	3·6	,, ...	,,
1867 ...	3·17	9·0	— 42·5	4·78	+17·7	Hartlip	II.
1868 ...	3·32	6·1	65·9	5·60	4·8	Camusinas.....	XV.
1869 ...	3·68	5·0	77·7	6·70	4·5	Seathwaite.....	X.
1870 ...	3·20	7·5	43·8	6·00	17·1	Tongue	XIX.
1871 ...	3·08	5·7	61·6	4·24	9·6	Melbury.....	V.
1872 ...	4·10	6·6	73·1	5·82	3·2	Seathwaite.....	X.
1873 ...	2·97	6·2	60·7	4·20	—2·9	,, ...	,,
1874 ...	3·96	4·6	86·5	5·32	4·4	Bryn Gwynant	XI.
1875 ...	4·52	7·8	63·9	5·33	9·7	Newport W. W.	,,
1876 ...	3·37	5·9	57·6	4·50	5·5	Foffany	XXIII.
1877 ...	3·77	4·6	93·4	4·98	5·3	Skye, Portree..	XVIII.
1878 ...	3·57	7·4	57·2	4·24	8·6	Springfield ...	XI.
1879 ...	3·66	9·5	50·4	—4·05	4·1	Little Langdale	X.
1880 ...	3·50	7·7	51·1	4·75	3·9	Seathwaite.....	,,
1881 ...	3·65	4·9	83·1	5·42	4·7	Sligachan	XVIII.
1882 ...	3·28	4·5	84·3	4·51	3·0	Seathwaite ...	X.
1883 ...	3·69	6·1	72·4	5·27	9·0	Glenesmoel ...	XXI.
1884 ...	3·45	4·7	80·7	6·78	5·0	Seathwaite ...	X.
1885 ...	3·45	5·8	68·2	4·62	3·2	,, ...	,,
1886 ...	3·77	7·7	58·7	4·20	9·9	Little Bredy ...	V.
1887 ...	—2·83	6·1	56·8	4·93	13·0	Galway Q. Coll.	XXII.
1888 ...	4·20	5·9	77·0	5·20	5·4	Wythburn Vic.	X.
1889 ...	3·89	+9·9	49·2	4·45	16·5	N. Ockendon ..	IV.
1890 ..	5·01	6·9	95·1	7·29	3·7	Ben Nevis Obs.	XVIII.
1891 ...	4·38	4·7	+108·4	6·14	4·2	Seathwaite.....	X.
1892 ...	4·47	7·9	70·1	5·80	4·5	,, ...	,,
1893 ...	3·84	5·8	89·6	4·96	3·5	,, ...	,,
1894 ...	3·95	5·7	83·0	7·74	5·1	Ben Nevis Obs.	XVIII.
1895 ...	3·80	7·2	62·2	4·83	16·1	Mellington Hall	XI.
1896 ...	3·31	5·9	67·5	4·59	3·7	Seathwaite ...	X.
Mean ...	3·68	6·4	70·0	5·31	6·9	.....	...
1897 ...	+5·24	5·3	95·1	+8·03	5·6	Seathwaite ...	X.
Diff. ...	+1·56	—1·1	+25·1	+2·72	—1·3	.....	...

TABLE III.—*Maximum Percentages in* 1897.

Date.	Div.	Station.	Per Cent.	Fall.	Total.
Sept. 29 ...	III.	Chatteris, Horseway Lock...	14·1	2·40 in.	17·03 in.
June 30 ...	IX.	Tickhill	13·0	2·76 ,,	21·21 ,,
July 21 ...	IV.	Ipswich, Bishop's Hill	12·7	2·95 ,,	23·29 ,,
June 24 ...	II.	Weybridge, West Oaks.....	12·0	3·15 ,,	26·27 ,,
July 21 ...	I.	Stoke Newington, Cazenove-rd.	11·4	3·18 ,,	27·93 ,,
Sept. 29 ...	III.	Upwell, Euximoor House ...	10·9	2·37 ,,	21·80 ,,
,, ,,	IV.	Denver	10·7	2·55 ,,	23·80 ,,
,, ,,	III.	Upwell, Marmont Priory Lock	10·5	2·00 ,,	18·99 ,,
,, ,,	IV.	Outwell Sluice.....	10·0	2·15 ,,	21·54 ,,
Aug. 8 ...	III.	Daventry, Fawsley.....	9·8	2·62 ,,	26·82 ,,
June 24 ...	II.	Weybridge, Heathfield	9·8	2·45 ,,	24·94 ,,
,, ,, ...	,,	,, Field Place.....	9·6	2·35 ,,	24·44 ,,
Sept. 29 ...	III.	Cambridge, Sidney Street...	9·6	1·99 ,,	20·68 ,,
,, ,,	,,	Chatteris, Aylesby House...	9·5	2·02 ,,	21·37 ,,
Aug. 8 ...	VI.	Wednesbury, Ocker Hill ...	9·4	2·29 ,,	24·47 ,,
July 20 ...	II.	Rotherwick, Tylney Hall ...	9·3	2·47 ,,	26·54 ,,

TABLE VI.—*Max. Falls in each year exceeding* 2·00 *in., and exceeding* 3·00 *in.*

Year.	Total number of records.	Falls of 2·00 in. or more. Number.	Falls of 2·00 in. or more. Per cent. of total No.	Falls of 3·00 in. or more. Number.	Falls of 3·00 in. or more. Per cent. of total No.
1882	1463	140	9·6	8	0·6
3	1505	170	11·3	23	1·5
4	1691	138	8·2	9	0·5
5	1801	179	10·0	24	1·3
6	1718	158	9·2	44	2·6
7	1921	52	2·7	4	0·2
8	1974	374	18·9	34	1·7
9	1812	170	9·4	24	1·3
1890	2081	345	16·6	54	2·6
1	2218	270	12·2	39	1·8
2	2231	470	21·1	81	3·6
3	2267	183	8·1	29	1·3
4	2321	313	13·5	36	1·6
5	2423	249	10·3	31	1·3
6	2465	249	10·1	16	0·6
Mean	1993	231	11·4	30	1·5
1897	2598	275	10·6	62	2·4
Diff.	+605	+44	— ·8	+32	+ ·9

TABLE IV.—*Comparison of Max. Percentages with those in previous years.*

	MEAN.			ABSOLUTE.			
Years.	Per Cent.	Depth.	Mean total fall at these Stations.	Per Cent.	Depth.	Station.	Division.
		in.	in.		in.		
1865 ...	9·9	2·62	28·4	13·0	4·40	Fleckney.....	VII.
1866 ...	8·1	2·31	29·3	10·0	—2·48	Burton	VI.
1867 ...	11·0	2·85	25·3	+17·7	4·78	Hartlip	II.
1868 ...	8·6	2·55	30·1	11·0	4·00	Tongue	XIX.
1869 ...	7·9	2·17	27·9	10·0	3·40	Tillydesk	XVII.
1870 ...	10·0	2·34	22·9	17·1	+6·00	Tongue	XIX.
1871 ...	9·0	2·43	26·8	11·5	3·62	Warter	IX.
1872 ...	8·1	3·43	+42·5	10·0	3·70	Hillington Hall	IV.
1873 ...	9·7	2·39	24·7	11·8	2·77	Oscott	VI.
1874 ...	9·2	2·16	23·7	11·9	2·50	Welwyn.. [Hall	III.
1875 ...	10·2	+3·76	37·5	13·2	3·95	Letheringsett ...	IV.
1876 ...	— 7·4	2·49	33·7	— 8·5	3·70	Cragside	X.
1877 ...	8·2	2·73	33·1	9·3	3·09	Wellington.....	VI.
1878 ...	10·2	3·05	30·0	11·8	3·90	Haverstock Hill	I.
1879 ...	10·9	3·31	30·5	12·3	3·80	CambridgeM. V.	III.
1880 ...	9·5	3·06	32·3	11·7	3·34	Marmont Pr. L.	,,
1881 ...	8·1	2·42	30·3	10·6	3·20	Aboyne Castle..	XVII.
1882 ...	7·7	2·54	33·4	9·1	2·80	Bothalhaugh ...	X.
1883 ...	9·7	3·00	31·1	12·3	4·31	Skegness.....	VII.
1884 ...	11·7	2·33	—20·0	13·8	2·66	Diss(Thelveton)	IV.
1885 ...	8·9	2·71	30·7	9·6	2·62	Beccles,Ellough	,,
1886 ...	10·1	3·32	32·7	11·5	4·10	Methley Park...	IX.
1887 ...	9·5	—2·11	21·9	13·0	4·93	Galway, Q. Coll.	XXII.
1888 ...	10·9	3·05	28·3	11·8	3·24	Rothamstead ...	III.
1889 ...	12·7	3·51	27·8	16·5	4·45	N. Ockendon...	IV.
1890 ...	+14·4	3·60	25·1	17·2	3·68	Slough, Langley	III.
1891 ...	9·7	2·67	27·6	14·4	4·00	Sunnyside Aslm	XVI.
1892 ...	12·3	3·37	27·4	15·0	4·27	Tyntesfield	V.
1893 ...	12·0	2·81	23·4	16·2	4·48	Cranmer Hall...	IV.
1894 ...	9·0	2·54	28·3	11·1	3·56	Sidcup.....	II.
1895 ...	10·0	2·87	28·8	16·1	4·83	Mellington Hall	XI.
1896 ...	9·5	2·50	26·3	11·1	2·78	Barkby	VII.
Mean...	9·8	2·78	28·8	12·5	3·73	.....	...
1897 ...	10·8	2·48	23·2	14·1	2·40	Chatteris, H. L.	III.
Diff. ...	+1·0	— ·30	— 5·6	+ 1·6	—1·33	.....	...

TABLE V.—*Comparison of the Mean of all the Maximum Falls of* 1897 *with similar data for previous years.*

Years.	Number of Returns.	Mean Percentage.	Mean Amount.	Mean Total Fall in year.	Ratio taking 34=100.	Total Fall being assumed =34in. Mean Max. =
			in.	in.		
1865.....	481	5·1	1·70	33	97	5·0 per cent
1866.....	590	3·7	1·48	40	118	4·4 ,,
1867.....	584	4·6	1·44	31	91	4·2 ,,
1868.....	676	4·3	1·43	33	97	4·2 ,,
1869.....	637	4·2	1·42	34	100	4·2 ,,
1870.....	687	4·9	1·30	27	79	3·8 ,,
1871.....	752	4·9	1·49	30	88	4·4 ,,
1872.....	743	— 3·4	1·59	+ 47	+ 138	4·7 ,,
1873.....	809	4·6	1·35	29	85	4·0 ,,
1874.....	1010	4·4	1·41	32	94	4·1 ,,
1875.....	1081	5·0	+1·83	37	109	+5·4 ,,
1876.....	1112	3·9	1·49	38	112	4·4 ,,
1877.....	1180	3·8	1·56	41	121	4·6 ,,
1878.....	1186	4·3	1·49	35	103	4·4 ,,
1879.....	978	4·2	1·52	36	106	4·5 ,,
1880.....	1117	4·8	1·72	36	106	5·1 ,,
1881.....	1194	4·1	1·45	35	103	4·3 ,,
1882.....	1463	3·6	1·42	39	115	4·2 ,,
1883.....	1505	4·0	1·41	35	103	4·1 ,,
1884.....	1691	4·8	1·32	28	82	3·9 ,,
1885.....	1801	4·5	1·41	31	91	4·2 ,,
1886.....	1718	4·6	1·64	35	103	4·8 ,,
1887.....	1921	4·5	—1·14	— 25	— 74	—3·4 ,,
1888.....	1974	4·4	1·41	32	94	4·1 ,,
1889.....	1812	4·8	1·41	29	85	4·1 ,,
1890.....	2081	5·0	1·46	29	85	4·3 ,,
1891.....	2218	4·1	1·47	35	103	4·3 ,,
1892.....	2231	+ 5·4	1·62	30	88	4·8 ,,
1893.....	2267	4·8	1·30	27	79	3·8 ,,
1894.....	2321	4·2	1·46	35	103	4·3 ,,
1895.....	2423	4·5	1·37	30	88	4·0 ,,
1896.....	2465	4·4	1·33	30	88	3·9 ,,
Mean ...	1397	4·4	1·46	33	98	4·3 ,,
1897.....	2598	4·1	1·36	33	97	4·0 ,,
Diff....	+1201	— ·3	— ·10	0	— 1	— ·3 ,,

DROUGHTS IN 1897.

It is unnecessary to make remarks upon the advantage of rigorous definitions of droughts having been generally accepted, but it will be convenient to state them :—

ABSOLUTE DROUGHTS.—Periods of *more than* 14 consecutive days absolutely without measurable R.

PARTIAL DROUGHTS.—Periods of *more than* 28 consecutive days, the aggregate rainfall of which does not exceed 0·01 in. per diem.

The following tables are almost wholly compiled from the same selected stations as in previous years, the few inevitable absentees being replaced by records from the nearest available station, so as to ensure equable distribution over the country.

There was an Absolute Drought in the middle of January in West Cumberland and in Argyllshire, also in May at a few scattered stations, and at nearly all those in the S. of Ireland. There were a few in the early part of July, but the only general one was in the W. of England, in Wales, and in the S. of Scotland from October 18th to November 6th. On the whole, there were not much more than half the average, and there have been fewer only in 1888 and in 1890.

Of Partial Droughts there were scarcely any except in the Midland and Eastern counties of England in June and July ; there were not a quarter of the usual number, and the total number is small beyond precedent, except in 1888 and in 1890.

Droughts in 1897 *at* 50 *selected stations.*

	ABSOLUTE DROUGHTS.				PARTIAL DROUGHTS.			
	No. of Droughts.	Duration.		Stations without one.	No. of Droughts.	Duration.		Stations without one.
		Average.	Greatest.			Average.	Greatest.	
		days.	days.			days.	days.	
1888	17	17	20	35	4	42	50	46
1889	42	21	30	13	38	34	45	15
1890	13	18	20	39	3	30	31	47
1891	26	18	34	28	38	36	49	14
1892	36	16	20	25	17	35	64	33
1893	39	20	44	23	53	51	114	10
1894	52	18	31	10	44	37	62	13
1895	52	19	29	16	47	39	64	19
1896	27	18	26	25	49	40	75	16
Mean	34	18	28	24	33	38	62	24
1897	20	18	20	31	7	40	61	44
Diff.	—14	0	—8	+7	—26	+2	—1	+20

STATION & COUNTY.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS			
	Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Amount.
ENGLAND & WALES.							in.
London (Camden Square), N.W.. *Middlesex.*	May 6	May 25	20	None			
Dorking (Abinger Hall) ... . *Surrey.*	None			None			
Hythe..... *Kent.*	None			Sept. 30	Nov. 6	38	·35
Welwyn (Datchworth Rectory).. *Herts.*	June 29	July 18	20	June 25	Aug. 7	44	·38
Maxey Vic. [Market Deeping] ... *Northampton.*	May 11	May 27	17	April 22 June 20	May 29 Aug. 19	38 61	·30 ·55
Geldeston [Beccles]..... ..... *Norfolk.*	June 29	July 18	20	June 20	July 23	34	·30
Calne (High Street)..... *Wilts.*	None			None			
Torquay (Cary Green)..... *Devon.*	Oct. 19	Nov. 6	19	None			
Bideford (Northam Vicarage) ... *Devon.*	Oct. 19	Nov. 6	19	None			
St. Austell (Trevarna)..... ..... *Cornwall.*	None			None			
Ilminster (White Lackington) ... *Somerset.*	May 8	May 24	17	None			
Ross (The Graig) .... *Hereford.*	None			None			
Shifnal (Neachley) ... . *Salop.*	None			None			
Kenilworth (The Spring) ... . *Warwick.*	None			June 29	Aug. 4	37	·31
Worksop (Hodsock Priory) ..... *Notts.*	None			None			
Belper (Northfield) .... *Derby.*	None			None			
St. Michael's-on-Wyre ..... *Lancashire.*	Oct. 18	Nov. 6	20	None			

STATION & COUNTY.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Amount.
							in.
Knaresboro' (Farnham) ..... *York, W.R.*	July 6	July 21	16	None			
Driffield (Beverley Road) ..... *York, E.R.*	None			None			
Darlington (South End) ..... *Durham.*	None			None			
Morpeth (Bothalhaugh Garden)... *Northumberland.*	None			None			
Pawston [Coldstream]..... *Northumberland.*	None			None			
Whitehaven, Irish Street ..... *Cumberland*	Jan. 9 Oct. 19	Jan. 23 Nov. 7	15 20	None			
Chepstow (Shirenewton Hall) ... *Monmouth*	None			None			
Haverfordwest (High Street) ... *Pembroke.*	None			None			
Churchstoke (Mellington Hall)... *Montgomery.*	Oct. 19	Nov. 6	19	June 20	July 18	29	·27
Halkyn .... *Flint.*	Oct. 18	Nov. 6	20	None			
Lligwy ..... *Anglesea.*	None			None			
SCOTLAND.							
Garliestown (Galloway House)... *Wigton.*	None			None			
Cargen [Dumfries] ..... *Kirkcudbright.*	Oct. 18	Nov. 6	20	None			
Melrose Asylum .... *Roxburgh.*	None			None			
Edinburgh (Blacket Place)..... *Edinburgh.*	May 8	May 23	16	None			
Ardrossan (Kirkhall) ..... *Ayr.*	None			None			
Buchlyvie (The Manse) ..... *Stirling.*	None			None			

STATION & COUNTY.	ABSOLUTE DROUGHTS.			PARTIAL DROUGHTS.			
	Began.	Ended.	Lasted.	Began.	Ended.	Lasted.	Amount.
							in.
Strontian (Laudale) ..... *Argyll.*	Jan. 6	Jan. 20	15	None			
Islay (Ardbeg) ..... *Argyll.*	None			None			
Kirriemuir (Lintrathen)... ..... *Forfar.*	None			None			
Cromar (Logie Coldstone Manse) *Aberdeen.*	None			None			
Alness (Ardross Castle) ..... *Ross.*	None			None			
Golspie (Dunrobin Castle) ..... *Sutherland.*	None			None			
IRELAND.							
Dunmanway (Coolkelure) ..... *Cork.*	May 8	May 24	17	None			
Killarney (Woodlawn) ..... *Kerry.*	May 8	May 24	17	None			
Clonmel (Bruce Villa) ..... *Tipperary.*	May 7	May 24	18	None			
Enniscorthy (Ballyhyland)..... *Wexford.*	May 8	May 24	17	None			
Bray (Fassaroe)..... *Wicklow.*	None			None			
Athlone (Twyford) ..... *Westmeath.*	None			None			
Ballinasloe..... ..... *Galway.*	None			None			
Collooney (Markree Observatory) *Sligo.*	None			None			
Belfast (Springfield) ..... *Antrim.*	None			None			
Stewartstown (The Square) ..... *Tyrone.*	None			None			

MONTHLY RAINFALL OF 1897.

On the following seven pages will be found the total rainfall for each month, and for the year, at 233 stations which have been selected as fulfilling as nearly as possible the following conditions :—

I. Equable geographical representation of all parts of the British Isles. That is to say, *e.g.*, that Rossshire has as many stations for each 100 square miles as has Kent.

II. Records are taken by preference from gauges read daily, and of which the orifice is at the standard height of 1 foot above the ground.

III. Stations are retained of which the records have been given in previous years, because that facilitates comparison—*i.e.*, changes are made only when unavoidable.

Large as is the total number of our correspondents, their unequally dense concentration in some districts, and paucity in others, makes it difficult to fulfil all the above conditions, but inspection of the tables will show how nearly perfection has been secured.

However, we need something besides a record of the actual fall in 1897, we require to know what relation the fall in each month all over the country bore to the average for that month ; and for such a comparison to be satisfactory, it must refer to a uniform average at all places, and the handiest available average is that of the years 1880–89. Some of the stations, desirable on geographical grounds and therefore inserted in the following tables, were not at work in 1880–89, and therefore we have to make a fresh selection of stations whose records were perfect for those ten years, and also throughout 1897, and from them we ascertain the facts we need.

The information is given in a very compact form by the sheet of small maps inserted between pages [138] and [139], on which over the site of each station will be found, a round dot if the rainfall for that month was within an inch of the average, a + if it was an inch or more above it, and a — if it was an inch or more below it.

Then on pages [139] to [142], we give a summary of each month, based on the above, on the tables given in the *Meteorological Magazine*, and on the remarks of the observers.

MONTHLY RAINFALL AT 233 STATIONS IN THE BRITISH ISLES DURING 1897.

ENGLAND.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
I.	Middlesex	London (Camden Square) ...	2·05	2·75	3·42	1·57	1·08	1·87	·64	2·92	2·75	·56	1·05	2·20	22·86
,,	,, ...	Harrow	2·06	2·82	3·84	1·92	1·56	4·13	·42	3·13	1·94	·76	1·12	2·31	26·01
II.	Surrey	Guildford (Epsom Road).....	2·42	3·06	4·77	1·45	1·76	1·83	1·82	3·89	2·48	·56	1·09	3·46	28·59
,,	Kent	Tenterden .....*Snowdon*	2·80	2·12	4·14	1·66	1·16	2·17	·75	3·23	2·43	·24	1·07	3·28	25·05
,,	,, ...	Hythe	3·44	2·22	3·68	1·93	1·15	1·81	·54	3·59	2·55	·33	1·83	3·51	26·58
,,	,, ...	Sevenoaks (Riverhead Vic.)	2·23	2·42	4·49	1·37	1·22	1·55	·35	2·36	2·87	·24	1·26	2·92	23·28
,,	,, ...	Ospringe (Lorenden)	2·26	2·14	3·91	1·56	1·07	2·78	·64	2·31	2·22	·33	1·32	3·48	24·02
,,	Sussex	Arundel (Patching)	2·73	3·47	4·61	2·01	1·04	2·80	·68	2·09	2·49	·47	1·87	3·89	28·15
,,	,, ...	Maresfield (Forest Lodge) ..	2·36	2·92	4·96	2·15	1·78	1·95	1·45	3·56	3·01	·45	1·51	3·82	29·92
,,	Hants.....	I. of Wight (Sandown).....	2·96	3·62	5·61	2·53	2·19	3·03	·35	3·13	2·42	·35	1·89	4·54	32·62
,,	,, ...	Bps. Waltham (Swanmore Ho.)	2·72	3·85	4·90	2·01	1·62	2·09	1·26	4·43	2·79	·65	1·32	3·89	31·53
,,	,, ...	Basingstoke(Sherborne S.J.)	2·06	3·05	4·23	1·36	1·32	2·14	2·74	2·72	2·16	·91	1·24	4·34	28·27
,,	Berks	Newbury (Welford Park)*o.g.*	2·35	3·10	4·51	1·89	1·11	2·32	1·51	2·84	3·76	1·19	·92	4·56	30·06
III.	Herts	Hertford (Bayfordbury).....	2·21	2·40	3·19	1·46	1·35	2·40	·61	2·39	2·27	·74	1·01	2·46	22·49
,,	,, ...	Royston	2·24	2·32	3·55	1·44	1·04	2·14	·48	3·17	2·80	·69	·88	1·83	22·58
,,	Bucks.....	Buckingham (Adstock)	1·76	2·66	2·37	1·63	1·20	2·25	1·76	5·81	3·08	1·29	1·08	2·97	27·86
,,	Oxford	Henley (Northfield House)..	1·97	2·89	3·94	1·43	1·30	2·45	·21	1·94	2·01	1·12	·91	3·60	23·77
,,	,, ...	Oxford (Magdalen Coll.) ...	1·79	2·21	2·59	2·39	·92	2·40	1·76	3·55	2·21	1·32	1·09	2·28	24·51
,,	Northampton ...	Wellingborough(Swanspool)	2·09	2·72	3·32	1·63	1·67	2·42	·11	2·76	2·84	1·22	·91	2·26	23·95
,,	Bedford	Bedford (The Grove)	2·66	2·67	2·84	1·80	1·68	1·89	·82	2·77	2·51	1·21	·87	2·07	23·79
,,	Cambridge.....	Ely (Stretham)	1·15	1·93	1·79	·97	·82	1·87	·96	1·57	2·84	·95	·99	·89	16·73
,,	,, ...	Wisbech (Bank House).....	1·76	2·26	2·12	1·56	·80	2·03	·60	3·07	3·48	1·12	1·69	1·45	21·94
IV.	Essex	Loughton (High Beech) ...	1·77	2·28	3·59	1·34	1·57	2·17	·79	2·96	2·37	·64	·97	2·43	22·88
,,	,, ...	Chelmsford (High Street)...	1·98	2·39	3·49	1·68	·84	3·33	·56	2·30	2·48	·67	1·05	2·21	22·98
,,	,, ...	Braintree (Bocking Place)..	2·04	2·34	3·24	1·77	1·56	2·30	·69	1·97	3·43	·76	·92	1·85	22·87
,,	Suffolk	Ipswich (Bishop's Hill).....	2·28	2·09	2·71	1·72	·81	2·28	3·25	2·08	2·96	·47	·95	1·69	23·29
,,	,, ...	Haverhill (Great Thurlow).	1·69	2·03	2·67	1·87	·76	2·23	·82	3·12	2·75	·73	·89	1·46	21·02
,,	,, ...	Framlingham(MountPleasant)	2·57	2·36	2·58	1·71	·60	2·29	·70	1·89	3·16	·62	1·22	1·43	21·13
,,	Norfolk	Geldeston [Beccles]	2·24	1·97	2·25	1·57	·81	1·86	·43	1·57	3·14	·76	1·22	1·93	19·75
,,	,, ...	Swaffham.....	1·51	2·38	2·69	2·32	·89	2·26	·71	3·12	4·03	·99	1·56	1·86	24·32
,,	,, ...	Holt (Field Dalling).....	1·47	2·46	2·18	1·48	·55	1·72	·75	2·04	3·43	·91	1·26	1·50	19·75

ENGLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August	Sept.	Oct.	Nov.	Dec.	Total.
V.	Wilts	Salisbury (Alderbury)	2·42	3·42	4·82	2·24	1·41	2·93	·72	2·74	2·71	1·56	·80	5·64	31·41
,,	,, ...	Trowbridge (Wingfield) ...	1·88	3·33	3·88	2·37	1·25	3·28	1·49	4·32	2·68	1·55	1·10	4·81	31·94
,,	,, ...	Marlborough (Mildenhall).	2·25	2·92	4·72	2·51	1·26	3·20	·80	3·62	3·31	1·59	·99	5·28	32·45
,,	Dorset	Beaminster Vic.	2·44	4·32	4·60	3·54	1·53	2·80	·67	4·49	2·97	1·34	·96	7·29	36·95
,,	,, ...	Wimborne (Chalbury).....	2·17	3·50	5·42	2·70	2·05	2·90	1·12	4·78	3·18	1·38	1·07	5·10	35·37
,,	,, ...	Hazelbury Bryan Rectory.	2·89	4·17	6·44	3·67	1·65	3·68	·48	3·79	3·62	1·40	1·53	8·89	42·21
,,	Devon	Torquay (Watcombe Park)	2·74	3·63	5·16	4·45	1·96	3·28	1·93	3·75	3·37	1·14	1·54	6·84	39·79
,,	,, ...	Walkhampton (Lowery) ...	3·77	6·05	6·09	4·49	2·48	3·11	1·90	6·34	4·97	2·02	3·17	9·69	54·08
,,	,, ...	Ilsington (Middlecott Ho.)	3·58	4·00	6·51	5·79	1·78	3·11	1·81	6·54	3·97	1·88	3·28	12·23	54·48
,,	,, ...	Cullompton	2·56	4·14	4·53	3·29	1·41	2·50	1·45	5·85	3·99	1·66	1·59	5·88	38·85
,,	,, ...	South Molton (East Street)	2·95	6·44	4·54	5·09	1·89	2·71	1·41	6·53	5·22	1·38	3·43	5·42	47·01
,,	Cornwall	Penzance (Penlee)	3·85	4·62	5·41	4·92	1·64	2·42	·88	5·14	5·22	1·93	3·34	7·78	47·15
,,	,, ...	St. Agnes	3·28	4·90	3·97	4·45	1·67	1·65	·92	3·95	4·06	1·40	3·39	6·83	40·47
,,	,, ...	Bude	1·93	5·03	3·25	3·67	1·31	2·77	2·97	5·24	6·27	1·71	2·30	5·28	41·73
,,	Somerset	Ilminster (White Lackington)	2·29	4·48	5·29	3·09	1·88	2·60	·82	4·62	3·67	1·85	1·16	6·62	38·37
,,	,, ...	Glastonbury (Street)	1·67	3·46	3·31	2·52	1·60	2·35	1·32	3·98	3·23	1·50	1·14	4·08	30·16
,,	,, ...	Minehead	2·73	3·56	4·49	2·52	1·33	2·93	·97	2·70	4·00	·83	2·16	5·36	33·58
VI.	Gloucester.....	Clifton (Pembroke Road)...	1·90	3·59	4·20	3·68	1·65	3·22	1·83	6·37	3·82	1·22	2·06	4·31	37·85
,,	,, ...	Stroud (Upfield)	2·40	2·94	3·60	1·81	1·52	2·44	2·91	5·59	2·69	1·56	1·72	4·02	33·20
,,	,, ...	Fairford (Hatherop Rec.)...	2·11	2·91	3·70	2·19	1·04	2·69	1·19	5·19	2·12	1·82	1·69	3·58	30·23
,,	,, ...	Moreton-in-Marsh(Longboro')	2·17	2·97	4·89	1·47	1·22	3·35	1·26	6·34	2·07	1·62	1·62	4·21	33·19
,,	Hereford	Ross (The Graig)	2·42	2·19	3·81	2·13	1·24	3·20	1·69	3·92	2·60	1·84	1·87	3·60	30·51
,,	,, ...	Leominster (Farm)	1·79	2·10	3·26	1·56	1·03	2·70	2·15	3·39	2·28	1·24	1·57	3·76	26·83
,,	Salop	Ch. Stretton (Woolstaston)	2·29	2·39	3·76	2·21	1·19	2·73	·99	3·32	2·49	1·10	2·02	3·63	28·12
,,	,, ...	Much Wenlock (Willey Pk.)	2·40	2·24	2·28	2·15	·88	3·44	·57	2·76	1·91	1·28	1·64	2·87	24·42
,,	,, ...	Ellesmere (Oteley)	1·43	2·79	2·59	2·11	·85	2·41	·57	2·99	1·70	1·59	2·09	3·51	24·63
,,	Stafford	Penkridge (Rodbaston) ...	1·83	3·07	2·25	2·63	1·23	3·31	·91	3·19	3·12	·97	2·05	2·77	27·33
,,	,, ...	Burton (Shobnall)	1·71	3·06	2·27	1·71	1·25	2·11	·15	3·77	2·61	·69	1·72	2·67	23·72
,,	,, ...	Etruria	1·24	3·04	2·33	3·05	·72	3·52	·60	4·45	4·27	1·49	3·12	4·13	31·96
,,	Worcester	Malvern (Madresfield Rec.)	1·86	2·57	3·79	1·57	·94	2·80	1·10	4·16	2·53	1·68	1·99	3·12	28·11
,,	,, ...	Stourbridge (Pedmore) ...	1·90	2·30	3·39	1·99	1·12	3·04	·82	5·04	2·14	1·26	1·91	2·63	27·54
,,	Warwick	Leamington (The Parade).	1·94	3·04	2·32	1·61	1·14	2·80	·46	3·28	1·87	1·53	1·49	1·75	23·23
,,	,, ...	Bedworth Cemetery.....	1·93	3·79	2·56	1·78	1·78	3·25	·23	3·50	2·57	1·72	1·46	3·06	27·63
VII.	Leicester	Loughboro'(Nan Pantan Res)	2·27	2·88	2·34	2·85	1·78	2·90	·54	2·65	3·11	1·15	1·38	3·20	27·05
,,	,, ...	Belvoir Castle .....*n.g.*	1·44	3·06	2·41	1·52	1·09	2·37	1·70	4·51	2·13	1·08	1·42	2·43	25·16

ENGLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
VII.	Rutland.....	Market Overton	2·13	2·86	2·45	1·36	·85	1·76	·81	4·17	2·66	1·02	·98	1·97	23·02
,,	Lincoln	Sleaford (Rauceby Hall) ...	2·55	3·40	2·32	1·38	1·29	3·15	·96	3·67	2·89	·88	1·52	2·05	26·06
,,	,, ...	Market Rasen	1·96	2·47	2·20	1·28	1·41	1·72	·30	3·45	3·65	·79	2·53	1·88	23·64
,,	,, ...	West Halton.....	1·64	2·15	2·98	1·83	1·69	2·18	·36	2·33	2·86	1·58	1·68	2·69	23·97
,,	Notts	Ollerton(ThoresbyGardens)	2·48	2·76	2·11	·81	·71	2·20	·71	3·19	2·20	·92	1·31	3·07	22·47
,,	Derby.....	Darley Hall	2·59	3·92	3·99	2·43	1·53	3·37	1·10	2·80	2·71	1·20	3·26	4·74	33·64
VIII.	Cheshire.....	Congleton(BuglawtonVic.)	1·28	2·32	2·44	2·56	·91	3·18	1·04	2·96	3·65	1·38	2·89	3·08	27·69
,,	Lancashire.....	Manchester (Withington).	1·34	2·07	2·08	2·31	1·80	3·47	1·73	3·45	3·79	1·87	4·74	3·22	31·87
,,	,, ...	Ormskirk (Rufford).....	1·18	2·55	2·92	2·24	1·54	3·87	1·71	4·74	3·86	2·28	4·48	3·31	34·68
,,	,, ...	Burnley (Swinden, Lower)	2·07	3·65	5·85	3·13	2·39	4·18	1·99	6·50	5·10	2·08	4·41	5·98	47·33
,,	,, ...	St. Michael's-on-Wyre ...	1·24	2·67	4·16	3·02	1·75	4·87	1·85	4·46	3·76	2·27	4·99	3·86	38·90
,,	,, ...	Cartmel (Pit Farm).....	1·18	3·06	5·78	2·76	1·88	4·87	1·59	4·83	4·74	3·21	7·01	6·75	47·66
IX.	York, W.R.	Rotherham (Moorgate Grove	2·39	2·87	2·80	1·42	·88	2·04	·74	2·42	1·78	·98	2·08	2·38	22·78
,,	,, ...	Huddersfield (Dalton).....	3·53	3·69	5·01	2·98	1·28	5·38	·97	2·94	4·14	2·42	3·94	4·69	40·97
,,	,, ...	South Milford Rectory ...	2·19	2·53	2·12	2·15	1·29	2·53	·69	3·17	2·63	1·41	2·03	2·34	25·08
,,	,, ...	Malham Tarn ..... *old g.*	2·01	4·91	7·59	3·43	3·56	5·06	2·39	10·28	6·13	2·80	4·76	9·81	62·73
,,	,, ...	Ripon (Mickley)	1·73	2·70	4·65	1·61	·96	3·02	1·03	3·31	1·83	1·72	1·54	3·47	27·57
,,	York, E.R.	Patrington.....	2·03	2·81	2·44	1·25	1·72	1·52	·25	4·14	2·74	·97	2·95	1·48	24·30
,,	,, ...	Pocklington (Warter)	2·85	2·56	3·10	1·96	1·39	2·48	·76	3·73	2·81	1·57	2·98	2·66	28·85
,,	,, ...	Ganton Hall	2·57	2·44	3·38	1·60	1·45	2·18	·51	5·14	3·25	1·55	2·28	2·32	28·67
,,	York, N.R.	Thirsk (Sowerby)	1·37	1·23	1·98	1·27	1·05	1·97	1·00	4·29	2·00	1·70	1·71	1·73	21·30
,,	,, ...	Whitby (Royal Crescent)...	1·87	1·75	3·81	1·24	·90	2·47	1·02	2·52	3·29	1·07	2·08	2·53	24·55
,,	,, ...	Lockwood Beck	2·47	1·99	4·18	1·73	·94	2·62	1·36	3·59	3·26	1·61	2·92	2·01	28·68
X.	Durham.....	Darlington (South End) ...	1·84	1·70	2·54	1·91	1·80	2·34	·97	2·66	1·87	1·86	1·88	2·43	23·80
,,	,, ...	Hartlepool(HurworthBurn)	2·19	1·77	2·63	1·49	1·38	2·40	·90	3·34	2·50	1·33	2·14	1·50	23·57
,,	,, ...	Wolsingham	2·21	1·93	5·72	2·31	1·73	3·30	1·14	2·80	2·23	2·19	2·11	3·14	30·81
,,	Northumberland	Haltwhistle(UnthankHall)	1·11	2·85	5·53	1·85	1·67	3·79	1·91	3·82	5·00	1·72	2·67	4·16	36·08
,,	,, ...	Morpeth (Bothalhaugh Lawn)	1·88	1·33	3·38	1·54	1·16	2·90	1·26	2·71	2·86	1·76	2·20	2·33	25·31
,,	,, ...	Alwinton (Biddleston) ...	2·09	2·11	4·76	1·90	·90	3·05	2·30	3·60	3·38	1·79	3·44	3·36	32·68
,,	,, ...	Howick Hall.....	2·36	1·24	3·62	1·05	1·15	2·87	3·43	2·61	2·43	1·71	2·60	2·61	27·68
,,	Cumberland	Borrowdale (Seathwaite)...	2·25	12·93	20·39	7·49	5·91	9·21	7·95	18·03	12·36	8·80	21·36	20·98	147·66
,,	,, ...	Brampton (Denton House)	·44	2·18	4·45	2·21	1·60	3·33	1·99	3·54	5·14	1·99	3·89	3·67	34·43
,,	Westmoreland ...	Kendal (Kent Terrace) ...	1·04	4·65	8·36	2·94	2·25	3·45	1·61	5·33	6·10	2·92	7·20	8·79	54·64
,,	,, ...	Appleby (Ormside)	·71	2·29	4·09	2·02	1·10	2·54	1·31	4·44	3·84	2·61	2·73	4·75	32·43
,,	,, ...	Lowther Castle.....	1·05	2·77	6·52	2·30	1·19	3·07	1·16	5·98	3·90	2·98	3·46	8·83	43·21

MONMOUTH, WALES AND THE ISLANDS.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XI.	Monmouth.....	Chepstow (Shirenewton Hall)	2·36	3·96	4·56	4·33	2·72	3·94	1·84	6·31	4·50	2·44	3·31	6·66	46·93
,,	,, ...	Abergavenny(Larchfield)..	2·81	2·31	5·62	3·92	1·59	2·94	1·38	5·55	3·18	3·49	1·29	8·02	42·10
,,	Glamorgan.....	Cardiff Castle	2·08	4·06	4·08	3·94	1·24	3·19	1·67	7·37	5·53	1·78	2·61	6·17	43·72
,,	,, ...	Neath (Fairy Land).....	2·75	5·98	5·43	4·70	2·27	3·99	1·85	9·60	7·11	3·43	3·93	6·25	57·29
,,	Carmarthen	Llanelly(Old Market Place)	1·85	5·67	6·25	4·15	1·66	3·38	1·71	5·48	5·20	2·41	3·11	6·06	46·93
,,	,, ...	Llandovery	2·24	4·78	6·89	3·75	1·64	2·56	2·29	6·80	4·99	2·18	4·46	7·48	50·06
,,	Pembroke	Stackpole Court	2·54	4·34	4·87	4·24	1·15	2·82	2·03	4·28	5·13	2·22	3·32	6·35	43·29
,,	Cardigan	Strata Florida (Hafod).....	2·35	5·59	6·23	5·04	2·16	2·50	3·24	5·19	8·87	2·35	5·64	6·76	55·92
,,	Brecknock.....	Brecknock (Cantreff Rec.)	2·70	5·62	5·69	3·86	2·24	3·06	2·32	5·37	3·98	2·98	4·57	11·80	54·19
,,	,, ...	Newbridge (Llysdinam) ...	1·72	3·14	4·98	3·98	1·37	2·88	2·81	5·10	3·64	1·69	3·32	7·03	41·66
,,	Radnor	Rhayader (Nantgwilt) *o.g.*	2·70	4·19	7·92	5·97	1·73	3·10	3·15	6·04	6·26	2·17	5·76	11·05	60·04
,,	Montgomery.....	Churchstoke(MellingtonHall)	1·97	1·89	4·06	2·68	·99	1·82	1·19	2·48	1·74	1·38	2·02	4·97	27·19
,,	Flint	St. Asaph (Nantllys)	1·44	1·38	2·04	1·99	·78	1·68	·23	2·41	3·73	1·57	3·74	2·70	23·69
,,	Denbigh.....	Rosset (Trevalyn Hall) ...	1·59	2·22	2·84	1·66	1·37	2·62	·49	2·21	2·80	1·45	2·63	2·41	24·29
,,	Merioneth	Dolgelly (Werngoch)	2·53	5·73	9·93	5·14	2·84	3·53	2·98	8·22	7·32	3·43	8·33	11·97	71·95
,,	,, ...	Llanderfel (Palé)	1·97	3·41	7·53	3·14	1·40	2·85	1·82	5·95	4·28	2·16	4·44	9·36	48·31
,,	,, ...	Oakley Quarries	2·15	10·71	9·95	6·77	3·27	6·01	5·68	12·83	10·83	4·19	15·54	12·55	100·48
,,	Carnarvon.....	Llanystumdwy (Talarvor)	1·60	3·48	3·66	3·15	1·35	3·18	1·51	4·46	4·10	1·26	5·31	4·50	37·56
,,	Anglesey	Llanerchymedd (Llwydiarth)	1·48	2·45	3·80	3·35	1·05	2·81	1·13	4·34	3·89	1·64	6·98	5·87	38·79
,,	Isle of Man	Douglas (Victoria Road)...	2·53	3·62	4·81	2·97	1·51	4·76	1·56	3·90	5·44	2·32	5·99	5·36	44·77
,,	Jersey.....	St. Helier (St. Louis Obs.)	2·53	2·24	3·55	3·34	1·89	3·43	·59	5·53	3·65	1·02	1·32	3·84	32·93
,,	Guernsey	St. Peter Port (Beaulieu)..	2·91	2·90	5·18	3·94	2·45	3·66	·47	4·65	4·11	1·17	1·61	5·42	38·47
							SCOTLAND.								
XII.	Wigton	Garliestown (Galloway House)	2·39	2·67	5·93	2·82	1·37	5·61	1·76	4·60	4·38	2·33	3·43	8·19	45·48
,,	,, ...	Corsewall	·33	·93	3·71	1·37	1·58	4·62	1·90	5·92	3·43	2·66	3·07	4·77	34·29
,,	Kirkcudbright ...	Dalbeattie(Colvend Manse)	1·48	2·45	5·24	2·58	2·39	3·42	1·19	4·56	2·52	1·63	5·22	3·92	36·60
,,	,, ...	New Galloway (Glenlee)...	2·99	4·44	8·57	3·35	1·94	4·75	2·46	7·89	4·58	3·80	5·66	11·81	62·24
,,	Dumfries	Langholm	1·73	4·91	7·70	4·11	3·61	3·67	3·43	9·84	4·57	3·10	6·41	9·30	62·38
,,	,, ...	Moffat (Ericstane)	1·90	5·70	8·80	3·00	3·40	4·70	2·30	8·85	3·10	3·10	4·70	19·00	68·55
,,	Roxburgh	Hawick (Branxholme).....	·63	2·54	4·50	1·63	1·82	3·14	2·12	4·34	2·36	2·02	2·65	4·62	32·37
,,	,, ...	Jedburgh	·84	·91	3·20	1·04	1·55	2·59	3·52	3·47	2·52	1·65	2·10	3·12	26·51
XIII.	Selkirk	The Hangingshaw	2·91	3·35	6·00	1·78	1·46	4·17	1·84	5·89	2·51	2·28	2·11	6·10	40·40
,,	Peebles	Eddlestone (Portmore) ...	1·76	1·94	4·27	1·37	1·88	4·28	2·50	4·77	2·90	1·22	2·47	3·10	32·46

SCOTLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XIII.	Berwick.....	Marchmont House	1·78	1·40	3·86	1·77	1·42	3·18	1·65	3·60	2·72	2·05	2·45	3·12	29·00
,,	Haddington	Haddington Asylum	1·18	·96	2·85	·80	·96	3·37	2·50	3·69	2·69	·72	1·82	2·23	23·77
,,	Edinburgh.....	Edinburgh (Blacket Place)	·80	1·42	2·87	1·04	1·28	3·99	1·82	4·24	1·64	1·27	1·97	2·45	24·79
,,	Linlithgow	Uphall	·93	2·07	3·81	1·21	1·67	4·45	1·49	3·42	2·44	1·31	3·01	4·38	30·19
XIV.	Lanark	Biggar (Cambus Wallace)..	1·22	2·08	3·52	1·51	1·80	4·78	2·62	4·30	2·58	1·34	2·70	4·58	33·03
,,	,, ...	Hamilton (Water Works)..	1·10	3·10	4·15	2·15	2·45	5·80	1·55	3·40	2·85	1·60	3·05	6·20	37·40
,,	Ayr.....	Colmonell	1·70	2·63	6·32	3·12	1·40	5·22	1·89	6·21	3·90	2·60	4·34	6·97	46·30
,,	,, ...	Dalmellington (Benquhat).	1·23	3·86	5·85	2·25	2·70	6·28	3·42	6·23	7·06	2·73	4·49	6·29	52·39
,,	,, ...	Ardrossan (Kirkhall)	1·12	2·45	4·42	1·88	1·48	7·26	1·50	5·78	3·45	2·46	2·39	4·32	38·51
XV.	Dumbarton	Arrochar	1·50	5·72	10·02	5·00	2·22	5·74	4·53	9·29	5·35	4·86	6·12	9·90	70·25
,,	Stirling	Buchlyvie (The Manse) ...	1·93	4·32	6·18	2·60	2·62	6·99	2·67	6·03	4·09	2·78	4·48	6·50	51·19
,,	Bute	Rothesay (Barone Cott.) ...	1·36	3·39	4·08	2·63	3·09	6·35	3·37	5·36	4·25	2·57	3·26	5·01	44·72
,,	Argyll	Appin (Airds)	1·27	3·56	6·25	2·72	4·00	4·60	4·98	5·59	5·90	3·41	4·28	7·19	53·75
,,	,, ...	Morvern (Drimnin)	2·17	3·94	8·07	3·19	4·07	3·85	5·45	4·73	5·68	3·92	5·11	7·25	57·43
,,	,, ...	Ballachulish (Ardsheal) ...	1·48	6·02	8·84	3·99	4·47	4·70	5·96	5·23	6·20	5·03	5·93	9·22	67·07
,,	,, ...	Strontian (Laudale).....	1·65	4·86	8·16	4·02	3·52	1·93	5·24	5·65	5·85	3·47	3·64	10·39	58·38
,,	,, ...	Kintyre (Devaar)	2·05	3·50	5·23	2·80	1·37	4·90	3·02	6·64	3·97	2·36	3·52	7·78	47·14
,,	,, ...	Tarbert (Stonefield).....	1·97	5·32	7·05	3·94	3·83	7·97	5·81	5·98	8·66	5·01	6·07	8·74	70·35
,,	,, ...	Islay (Ardbeg)	1·80	2·48	3·99	1·74	2·63	5·55	2·90	3·76	5·08	2·46	2·94	5·11	40·44
,,	,, ...	Jura (Ardfin)	2·08	4·00	5·42	3·04	3·12	5·46	2·71	4·97	6·05	3·47	3·34	6·36	50·02
XVI.	Clackmannan ...	Dollar	1·88	2·60	5·47	1·51	1·77	6·19	1·73	6·17	3·47	1·45	3·87	5·87	41·98
,,	Kinross	Loch Leven Sluice	1·90	2·40	5·50	1·60	1·80	4·90	1·80	4·60	3·00	1·70	2·90	6·00	38·10
,,	Fife	Kilconquhar (Balcarres) ...	1·40	1·18	3·44	1·65	·87	5·77	2·08	4·13	1·14	1·87	2·24	4·32	30·09
,,	Perth	Stronvar	2·54	8·13	11·12	5·47	4·47	5·74	3·71	11·93	5·49	5·33	5·82	10·94	80·69
,,	,, ...	Coupar Angus	1·49	1·21	4·54	1·83	1·71	4·22	1·18	4·08	1·43	1·75	2·23	3·47	29·14
,,	,, ...	Dalnaspidal H.R.S.....	3·03	5·49	9·70	3·92	4·23	5·76	2·98	9·56	5·49	5·06	4·72	9·07	69·01
,,	Forfar.....	Broughty Ferry (Douglas Ho.)	1·48	·75	3·39	1·59	1·59	4·75	1·87	3·59	1·59	2·20	1·67	3·20	27·67
,,	,, ...	Kirriemuir (Balnakeilly)...	1·84	1·59	5·21	2·18	1·54	4·15	1·49	5·87	1·57	2·02	2·72	4·26	34·44
XVII.	Kincardine	The Burn [Brechin].....	1·94	1·50	5·58	2·40	1·97	4·08	1·70	4·38	2·05	2·42	2·44	4·58	35·04
,,	Aberdeen	Coldstone Manse	3·17	·66	4·61	1·26	2·01	4·44	1·72	4·04	·95	1·80	2·08	2·85	29·59
,,	,, ...	Haddo House	4·52	·52	4·00	1·66	1·54	3·71	1·44	3·05	2·40	2·18	2·09	2·83	29·94
,,	,, ...	Old Deer	3·91	·60	3·86	2·05	1·36	3·33	1·05	3·39	2·89	2·99	2·08	3·10	30·61
,,	Moray	Grantown	2·47	·84	2·85	1·31	1·79	4·13	1·05	4·52	2·88	·90	2·53	2·92	28·19
,,	,, ...	Gordon Castle	2·18	·86	3·23	1·13	1·55	4·40	1·27	3·02	3·45	1·16	2·43	3·39	28·07
,,	Nairn.....	Cawdor (Budgate)	1·58	·98	1·89	·79	1·59	3·63	1·04	2·43	2·49	1·13	2·44	3·04	23·03

SCOTLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XVII.	Nairn	Nairn (Achareidh)	1·49	·66	1·70	·50	1·23	2·71	·61	2·12	2·02	·86	1·76	2·24	17·90
XVIII.	Ross	Applecross	3·81	3·45	5·86	2·90	4·04	2·00	3·58	3·52	8·03	4·25	5·38	7·03	53·85
,,	,,	Strathconan [Beauly]	1·70	3·95	6·18	2·92	4·19	2·39	4·30	2·98	5·42	4·23	4·15	8·91	51·32
,,	,,	Braemore House	2·69	3·26	8·02	3·30	3·55	1·85	4·65	3·15	5·60	6·40	3·80	14·05	60·32
,,	,,	Ardross Castle	2·56	2·24	3·56	·94	2·59	2·96	2·08	1·46	2·31	3·12	4·23	2·93	30·98
,,	Inverness	Fort William (Observatory)	1·65	7·94	7·83	3·94	4·46	3·97	6·52	4·91	9·58	6·15	6·42	11·35	74·72
,,	,,	N. Uist (Loch Maddy)	2·18	4·28	6·16	3·91	2·06	1·32	3·69	3·95	5·89	2·80	3·97	7·11	47·32
,,	,,	Invergarry	1·35	6·50	5·29	3·31	1·73	2·40	1·24	3·43	6·30	4·32	3·60	12·26	51·73
,,	,,	Aviemore H.R.S.	1·72	1·56	2·12	1·44	2·09	3·93	1·38	3·03	2·91	1·50	2·25	5·41	29·34
XIX.	Sutherland	Invershin	1·66	1·00	5·34	·63	3 40	1·57	1·83	1·84	3·48	3·93	3·11	3·64	31·43
,,	,,	Dunrobin Castle	1·36	1·22	3·68	·68	2·55	1·54	1·03	2·57	1·71	3·14	2·01	2·78	24·27
,,	Caithness	Wick	3·18	·63	2·61	1·12	1·50	1·11	1·20	2·17	3·02	2·01	1·99	1·31	21·85
,,	,,	Watten Station	1·45	·88	2·63	·92	1·35	1·02	1·51	2·63	3·44	3·22	1·77	2·17	22·99
,,	Shetland	Sumburghead (Dunroseness)	2·05	2·26	3·46	1·80	1·96	1·78	2·49	3·55	3·37	3·19	3·38	5·46	34·75
		IRELAND.													
XX.	Cork	Dunmanway (Coolkelure)	5·73	6·75	11·29	8·55	2·63	5·36	2·58	9·32	4·45	7·91	9·65	10·65	84·87
,,	,,	Cork (St. Ann's Hill)	3·88	2·68	6·16	4·67	1·46	3·19	·93	5·19	1·93	6·20	5·55	5·27	47·11
,,	,,	Mallow (Summer Hill)	3·83	1·83	5·35	4·13	1·83	4·17	1·66	5·65	2·11	4·62	4·52	5·46	45·16
,,	Kerry	Darrynane Abbey	3·17	4·12	6·40	5·69	2·12	4·91	1·88	5·73	2·99	4·34	7·25	6·25	54·85
,,	,,	Kenmare (Derreen)	5·36	5·01	8·61	8·05	2·11	4·66	3·00	9·30	4·25	5·82	6·87	9·59	72·63
,,	Waterford	Waterford (Brook Lodge)	3·44	2·13	5·91	5·05	1·14	2·79	1·97	5·45	3·29	3·54	6·81	5·48	47·00
,,	Tipperary	Cahir Abbey	2·53	2·92	4·55	4·52	1·42	4·13	1·43	5·01	2·65	3·74	4·68	5·22	42·80
,,	,,	Nenagh (Castle Lough)	2·25	2·58	5·92	5·09	1·59	3·46	2·74	6·24	2·63	3·76	6·30	5·59	48·15
,,	,,	Ballingarry (Hazelfort)	2·04	1·78	5·00	4·04	2·17	3·52	2·51	4·63	2·76	2·82	5·31	3·54	40·12
,,	Limerick	Pallaskenry (Kilcornan)	1·74	1·22	4·49	5·21	1·24	4·03	2·02	4·51	3·14	2·04	4·72	3·87	38·23
,,	Clare	Killadysert (Paradise Hill)	2·29	2·87	5·99	6·23	2·00	7·20	3·06	6·65	3·88	2·64	6·44	6·38	55·63
,,	,,	Miltown Malbay	2·57	3·35	6·45	6·85	2·12	6·00	4·20	7·05	4·10	3·74	6·53	7·83	60·79
XXI.	Wexford	Ballyhyland	4·01	2·30	6·11	5·38	1·68	3·10	2·14	6·76	2·94	4·11	5·59	5·89	50·01
,,	,,	Gorey (Courtown)	2·93	1·98	4·59	4·19	1·18	2·67	1·69	4·99	2·50	2·83	4·71	4·22	38·48
,,	Kilkenny	Inistioge (Woodstock)	3·79	2·14	5·48	4·85	2·03	3·39	2·11	7·06	3·53	4·27	7·25	6·32	52·22
,,	,,	Kilkenny (Lavistown)	2·96	1·79	3·39	4·13	1·95	4·51	1·66	6·09	2·59	3·63	4·86	3·25	40·81
,,	Wicklow	Bray (Fassaroe)	4·17	1·41	5·81	4·08	1·37	4·19	1·74	5·76	3·22	3·43	4·70	4·13	44·01
,,	Carlow	Browne's Hill	2·55	1·80	4·75	3·63	1·62	3·60	1·53	5·74	3·19	3·01	4·59	3·47	39·48

IRELAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XXI.	Queen's County...	Abbey Leix (Blandsfort)...	2·71	1·64	4·09	4·61	1·86	3·76	2·57	6·34	3·26	4·12	5·12	3·88	43·96
,,	Kildare	Straffan House.....	2·76	2·17	3·84	3·14	1·14	3·54	2·53	5·01	3·18	2·18	4·73	3·35	37·57
,,	Dublin	Glasnevin(BotanicGardens)	2·86	1·58	3·31	3·07	1·28	3·70	1·87	4·55	2·57	2·14	3·67	2·32	32·92
,,	Meath	Athboy	1·60	2·71	4·41	3·29	·74	4·43	1·86	5·35	1·09	2·54	4·59	3·69	36·30
,,	,, ...	Moynalty (Westland)	2·45	2·99	5·16	4·11	1·48	4·85	3·38	5·52	2·37	3·01	4·39	4·26	43·97
,,	Westmeath	Athlone (Twyford)	1·92	2·42	4·91	4·54	1·39	4·43	3·23	5·55	2·03	2·76	4·42	4·48	42·08
,,	,, ...	Mullingar (Belvedere).....	2·40	3·35	4·22	4·36	·81	4·08	2·57	6·51	2·54	2·87	5·21	3·84	42·76
,,	Louth	Ardee (Lissrenny).....	3·35	2·07	4·12	3·36	1·39	5·16	1·60	5·17	2·13	2·23	3·06	2·89	36·53
,,	,, ...	Greenore	2·13	1·86	3·79	3·33	·91	5·20	1·87	4·81	2·25	1·94	3·81	2·85	34·75
,,	Longford	Edgeworthstown Currygrane	1·85	2·54	3·76	4·26	1·89	4·68	2·85	5·72	1·87	2·97	4·14	5·37	41·90
XXII.	Galway	Ballinasloe	2·01	2·44	4·75	4·78	1·50	5·37	2·47	7·00	2·15	3·07	4·33	4·59	44·46
,,	,, ...	Kylemore House	4·64	5·63	10·68	7·38	5·03	6·77	4·77	14·46	5·44	4·95	6·92	11·91	88·58
,,	,, ...	Tuam (Gardenfield).....	2·29	3·50	6·31	4·54	2·01	4·12	3·49	6·96	2·15	2·49	4·62	6·50	48·98
,,	Roscommon	Rooskey	1·60	2·49	4·25	3·81	1·47	5·35	2·54	5·57	1·78	2·40	3·52	6·12	40·90
,,	Mayo ...''.....	Ballinrobe (Cranmore).....	2·58	4·26	7·78	4·53	2·56	6·25	2·40	7·37	2·00	2·88	4·04	7·79	54·44
,,	,, ...	Crossmolina (Enniscoe) ...	2·70	4·65	8·03	4·90	2·70	3·96	3·73	7·30	3·02	3·67	3·94	7·78	56·38
,,	Sligo	Ballymote (New Park) ...	2·25	3·30	6·60	3·90	2·40	4·60	3·90	6·55	2·50	2·75	4·05	5·05	47·85
,,	,, ...	Ballysadare (Glen Lodge)..	1·79	3·35	6·51	3·17	2·14	4·20	3·15	5·18	2·30	3·01	3·57	6·07	44·44
,,	Leitrim	Ballinamore (Lawderdale).	2·03	3·20	6·39	5·18	2·02	6·07	3·34	6·74	1·89	3·13	4·28	6·55	50·82
XXIII.	Cavan	Stra tone House	2·06	2·63	4·99	4·21	1·43	4·68	4·17	5·93	1·99	3·98	3·55	6·09	45·71
,,	Monaghan.....	Dartrey.....	2·06	2·29	4·83	3·84	1·22	5·65	3·18	4·76	1·84	3·81	3·39	5·87	42·74
,,	Armagh.....	Bridge Street [Newry] ...	2·05	2·30	5·88	3·67	1·49	7·15	1·29	5·49	2·16	3·14	4·25	4·55	43·42
,,	,, ...	Armagh.....	1·42	1·81	4·19	2·97	1·44	5·63	1·92	5·32	1·61	2·26	2·53	3·97	35·07
,,	Down.....	Seaforde	2·22	2·53	4·73	2·57	1·56	5·88	1·33	4·64	2·57	3·25	3·52	4·78	39·58
,,	,, ...	Donaghadee	1·81	2·19	3·99	2·63	1·41	4·46	1·38	4·00	3·04	2·13	3·03	4·06	34·13
,,	Antrim	Belfast (Springfield).....	2·11	2·47	5·65	2·77	2·32	5·99	2·34	5·44	2·92	2·18	3·22	5·38	42·79
,,	,, ...	Ballymena.....	2·14	2·56	4·53	2·58	2·55	5·47	2·24	6·25	2·43	2·58	2·87	5·26	41·46
,,	,, ...	Bushmills (Dundarave) ...	1·86	2·37	4·19	2·38	2·21	5·68	2·33	4·73	2·86	2·34	2·35	4·64	37·94
,,	Londonderry.....	Garvagh (Moneydig)	1·60	2·49	4·50	2·15	2·30	6·40	2·04	5·52	2·12	2·40	2·45	5·42	39·39
,,	Tyrone	Stewartstown (The Square)	1·38	2·86	4·15	2·86	1·92	6·71	2·49	5·15	1·40	3·50	2·64	4·79	39·85
,,	,, ...	Omagh (Edenfel)	1·55	3·42	5·44	2·92	2·73	7·41	3·59	6·11	2·27	3·43	2·79	4·65	46·31
,,	Donegal.....	Killybegs	2·43	5·32	9·70	4·22	3·67	8·36	4·52	6·86	4·99	3·07	4·67	7·06	64·87
,,	,, ...	Horn Head	1·32	3·41	6·66	2·79	3·50	5·30	2·41	3·62	3·11	3·07	2·82	5·31	43·32

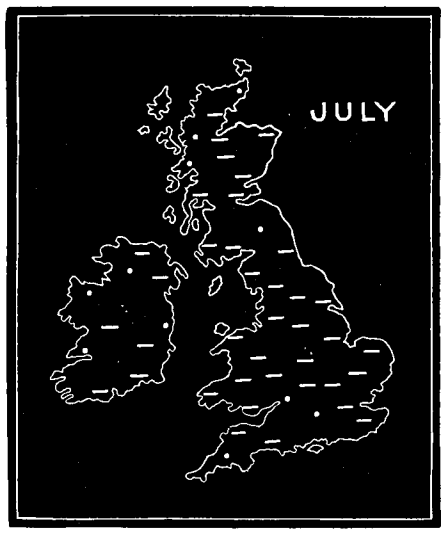
MAPS OF MONTHLY RAINFALL, 1897.

· Within an inch of average.

\+ More than 1 in. above average.

— ,, ,, ,, below ,,

MAPS OF MONTHLY RAINFALL, 1897.



· Within an inch of average.

\+ More than 1 in. above average.

— ,, ,, ,, below ,,

NOTES ON THE MONTHS.

JANUARY.

In the southern half of England and in Wales the fall was near, or slightly above, the average. In the N. (and especially the N.W.) of England, and in most parts of Scotland and Ireland the fall was less than usual. At Seathwaite the total was only 2·20 in., not one-seventh of the 50 years' average, and the smallest in the 53 years 1845–97, except 1881, when it was only 1·26 in. At Cargen [Dumfries] the total was 1·24 in., and in the record, which goes back to 1859, the only smaller falls in January were 1880 (·82 in.) and 1881 (·61 in.).

FEBRUARY.

Generally, nearly the average fall occurred over England and Wales, but with a tendency towards excess, and actually large excess, at a few stations, *e.g.*, at Weymouth the fall was greater than for 23 years, excepting in 1881 and in 1883, and at Hodsock Priory, Worksop, it was the wettest February on record, except 1881. In Scotland the fall was below the average, and in the N.E. of Scotland it was the driest month in the year. In Ireland the fall was very near the average.

MARCH.

A wet month; the wettest in the year in the S.E. of England, and for London very nearly the wettest on record. It was wet nearly all over the British Isles; in fact, the only exception that we can trace is the small county of Nairn. At most stations in the S. of England, and at a few in Scotland and Ireland, the fall was more than double the average. Many notes upon the excessive fall will

be found on pp. [46–49] which, therefore, need not be repeated, but we add a few others :—

III.	HERTS, *Hitchin*	R 4·13 in., only exceeded in 47 years by 1864=4·14 in.
,,	BUCKS, *Addington*	R 2·97 in., only exceeded in 27 years by 1876=3·60 in. & 1888=2·99 in.
V.	DORSET, *Weymouth*	R 4·51 in., only exceeded in 23 years by 1891=3·58 in.
VI.	WORCESTER, *Orleton*	R 3·44 in., only exceeded in 66 years by 1867=3·84 in.
XI.	PEMBROKE, *Haverfordwest* ...	R 5·75 in., unprecedented in 49 years.
XII.	KIRKCUDBRIGHT, *Cargen*	R 5·91 in., only exceeded in 39 years by 1868=8·14 in.
XXIII.	TYRONE, *Omagh*.....	R 5·44 in., unprecedented in 33 years.

APRIL.

The fall generally near the average; rather dry in the N. of Scotland, and rather wet in the S.W. of England and in Wales. In the S.W. of Ireland it was the wettest April for many years.

MAY.

Rain unequally distributed during the month, but the total near the average, except in the Eastern Counties of England, where it was below the average.

JUNE.

In this and the two following months the distribution of rain is so largely due to thunderstorms that irregularities are sure to occur, and the broad, general features only can be stated. Over England and Wales (except the northern part of each) the fall in June was about the average. In most other parts of the British Isles there was excess, most noteworthy in Central Scotland and in the North of Ireland. At Edenfell, Omagh, co. Tyrone, the total was 7·41 in., which was not merely unprecedented for June, but in *any* spring or summer month for 33 years; the total for the first six months, 23·57 in., was also unprecedented in the same period—a third of a century.

JULY.

This is usually a month of heavy rain, but in 1897 very few stations had their average, and at most the month was dry, or very

dry; at many English stations the fall was less than in any year for a quarter of a century.

AUGUST.

Wet, or very wet, almost everywhere, except in the N. of Scotland. The following are a few notes additional to those on pp. [62-65]:—

III.	BUCKS, *Addington*	R 5·68 in.,	unprecedented for	27	years.
IV.	SUFFOLK, *Bury St. Edmunds*	R 4·76 ,,	,,	,,	40	,,
XI.	PEMBROKE, *Haverfordwest* ...	R 6·15 ,,	,,	,,	18	,,

At Omagh, Tyrone, the total for the first eight months was 33·27 in., whereas the average is 22·51 in., there was therefore an excess of 48 per cent.

SEPTEMBER.

Rainfall generally near the average, but above it in the S.W. of England and parts of Wales, below it in the N.E. of Scotland and in the Northern half of Ireland.

OCTOBER.

In Ireland the rainfall was about the average, but in all other parts of the British Isles October was dry or extremely dry. The subject was fully dealt with in the November number of the *Met. Mag.*, and the additional evidence subsequently received does not appear to involve any modifications of the conclusions therein set forth; but it is desirable to preserve the details of this unprecedented drought in the S.E. of England, where it was most severe. Scores of stations had less than half-an-inch, and all the following had less than a fifth of an inch:—

KENT.	in.
Dungeness	·16
Wittersham	·00
Snargate	·16
Cranbrook, Swattenden	·15
,, Camden Lodge ...	·16
Tunbridge Wells, Pembury ...	·18
Staplehurst	·07
Maidstone, Lower Tovil	·16
,, Hospital	·14
St Peters	·19
Higham, Oakleigh	·15
Rochester, Lodge Hill	·15
,, Hoo St. Mary	·11

EAST SUSSEX.	in.
Beachy Head	·00
Bexhill	·11
St. Leonards, Gensing Gardens	·10
,, The Grove	·07
Lewes, Southmalling	·12
Hastings, Newgate Reservoir ...	·07
,, High Beech	·08
,, Guestling	·13
Winchelsea	·13
ESSEX.	
Southend	·15

It is curious that all these stations (except two, St. Peters and Lewes) are within a belt 30 miles from W. to E., and bounded by lines going due north from Beachy Head and from Dungeness respectively, and stopping immediately on the North side of the Thames. It is also noteworthy that the area of greatest intensity, Hastings, is nearly central in the belt. Of the Hastings returns there can be no doubt, for the five values in and around it (·07, ·07, ·08, ·10 and ·11 in.) agree beautifully, and prove the care of the observers. As is generally the case, the two entries of ·00 in. appear doubtful; it is difficult to understand why nothing fell on Beachy Head, although from ·20 in., to ·34 in. fell at every one of the eight surrounding stations within 4 miles, some of them being within 2 miles. Nor do we see why Wittersham had ·00 in., while the four nearest stations had from ·13 in. to ·24 in.

NOVEMBER.

Another dry month generally, but not in all parts. In the S.E. of England it was very dry; at Tenterden in Kent, for instance, where October yielded only ·24 in., November gave only 1·07 in., the least for any November since 1879; and at the neighbouring station of Bethersden it was even less, October being ·28 in. and November ·99 in.

In Wales the fall was about the average; in the English Lakes the great fall on November 12th caused the monthly totals to be in excess, and the month was also very wet in the Southern half of Ireland.

DECEMBER.

The rainfall this month was generally near to, or rather above, the average. There was no notable deficiency, and the only areas of considerable excess seem to have been South Wales, the S.W. of Scotland, and the S.W. of Ireland.

ON THE RELATION OF THE TOTAL FALL OF RAIN IN 1897 TO THE AVERAGE, AND ALSO TO SOME PREVIOUS YEARS.

As year by year it is our duty to sum up the facts reported to us by our many correspondents, it is, we suppose, inevitable that—while maintaining in its fullest integrity the principle and practice of continuity and strict comparability—new ideas will come, and fresh developments present themselves, with claims which we cannot ignore, though each implies additional work, and retards somewhat the date of publication of the yearly volume.

We have been led to pen this prefatory statement because we feel that the idea indicated by the last few lines in this section of *British Rainfall*, 1896, is so important that it ought to be developed; and, therefore, while we have left the beginning of the above heading as in previous years, we have added to it six other words.

In the first place, we will deal with the 1897 values solely in relation to the 1880–89 average. The actual figures are given on pages [146–149]; and the difference from the average at each station (expressed as a percentage of the mean) is indicated on the map facing page [144].

As seems to be usually the case, there are more than half the stations at which the fall in the year was within 10 per cent. of the mean—as is indicated by the prevalence upon the map of the round dots—and they will be noticed in most parts of England, Wales and Scotland, as well as in the E. and N. of Ireland.

Dry areas, indicated by —, appear near London, in Kent, in the Central and Eastern counties of England, and at a few stations in Wales and in Scotland, but there is not one in Ireland.

Very dry areas (— in a ring) are recorded for only three localities, viz., Ely, in Division III., Laudale, Argyllshire, Division XV., and Golspie, Sutherland, Division XIX.; although thus isolated, and to some extent unsupported, we see no reason to doubt either of them.

Wet areas (+) are more numerous; they occur in the S.W. and extreme N.W. of England, in S. Wales, in Central Scotland, and over most of Ireland.

Very wet (+ in a ring) areas are represented by five stations: two in the S.W. of Scotland and three in Ireland.

We append the usual summary, which shows that for England and Wales, and Scotland as a whole, the fall in 1897 was just the average, but that in Ireland, it was 12 per cent. in excess.

ABSTRACT.

COUNTRIES.	No. of Records.	Average 1880-89.	1897.	Diff. from Average. 1880-89.	
				Amount.	Per cent.
		in.	in.	in.	
England and Wales...	95	34·23	34·14	·09 —	0
Scotland.....	42	43·13	43·70	·57 +	1
Ireland	35	38·93	43·53	4·60 +	12
Mean of all Stations...	172	37·36	38·38	1·02 +	3

Comparison of 1897 with some Previous Years.

We showed last year that, up to the end of 1896, there had been in Leicestershire five consecutive years each with less than the 1880-89 average; the table on page [147] shows that 1897 has to be added to the series, bringing the total up to six consecutive years.

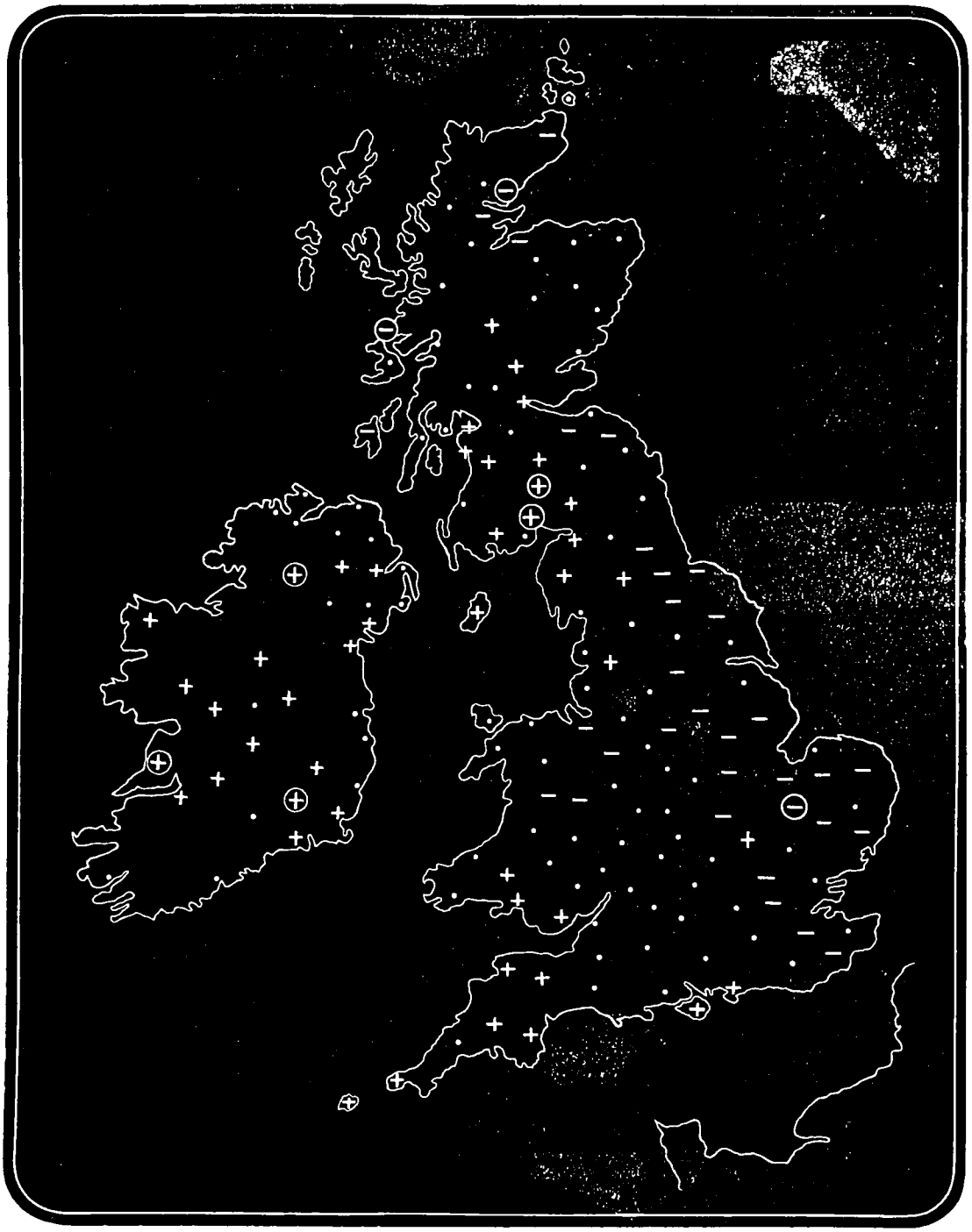
This has shown the desirability of adopting some plan whereby our readers can see how the fall is going on without the trouble of working it out from a series of back volumes. To the volumes they must go for details, but we think that the broad, general features for (say) eight or ten previous years should be given in each volume.

We do not pretend to have hit upon the best possible way to do this, but after several experiments, we have adopted the table on page [150], which we proceed to explain.

It will be remembered that the percentages of excess and defect given on tables like those on pages [146–149], are represented upon the map by round dots when they are within 10 per cent. of the average, by — and + respectively when they are between 10 and 25 per cent. below or above it, and by the same symbols in a ring when they are 25 or more per cent. below or above the mean.

We thought that it was not worth while to incur the cost of cutting

DIFFERENCE OF TOTAL RAINFALL IN 1897 FROM THE AVERAGE OF 1880-89.



The round dot indicates a rainfall within 10 per cent. of the average.

The + and — respectively show excess or defect of between 10 and 25 per cent.

The same signs enclosed by a ring indicate a departure from the average of more than 25 per cent.

special symbols for use in a table, and that our readers would find no difficulty in understanding the following equivalents :—

D=very dry, a year with the fall 25 % or more below the average.
d=dry, a year with the fall between 25% and 10% below the average.
...=average, a year with the fall within 10% per cent. of the average.
w=wet, a year with the fall between 10% and 25% above the average.
W=very wet, a year with the fall 25 % or more above the average.

For a general survey of the kind which we are trying to supply, it is desirable to have all the facts in the least possible compass, and minute details are not necessary ; we have, therefore, limited ourselves to 50 stations, and have gone back only eight years, by which means all the information is given on one page.

Our readers will at once see the remarkable prevalence of Dry (d) and Very Dry (D) years over England and Wales, especially in Divisions VI. and VII., *i.e.*, Central England, during the last eight years, and the very dissimilar state of things which has prevailed in Scotland.

However, we hope that the table tells the whole story so clearly that there is not any advantage in dwelling upon it.

But there is one point, not shown by the table, upon which a few words may be desirable.

Although, as years roll on and our staff increases, we have continually longer and better averages upon which to rely, it is not easy to get a sufficient number of stations (equally distributed over the British Isles) to form the basis of the tables on page [146, &c.] all with an identical average for 10 years, especially when, as now, we near the end of a decade, and it therefore involves the providing of about 200 equably distributed stations for every one of which the record is absolutely perfect for 18 years. If we made the period longer, we could not provide so good a geographical distribution ; if we made it shorter, we could perhaps double the number of stations, though, on the whole, we do not think it desirable to make any alteration.

But—and this is the point to which we desired to call attention—it is well known that a 10 years' average may be considerably above or below the true mean. We have, therefore, examined the 1880–89 averages for Divisions VI. and VII. to see whether the apparent excess of dryness reported for several recent years is due to the averages being unduly high, but it is not ; they appear to be very nearly the same as the averages for the thirty years 1860–1889.

COMPARISON OF THE RAINFALL OF THE YEAR 1897, WITH THE AVERAGE OF THE YEARS 1880-89.

ENGLAND & WALES.

DIV.	COUNTY.	STATION.	Average, 1880-9.	Depth in 1897.	Difference from average, 1880-9. Amount.	Per cent.
			in.	in.	in.	
I.	Middlesex	London (Camden Square)	25·45	22·86	2·59	— 10
II.	Surrey	Dorking (Abinger Hall)	30·60	31·29	·69	+ 2
,,	Kent	Tenterden .....(*Snowdon*)	28·11	25·05	3·06	— 11
,,	,, ...	Sheldwich	28·70	28·29	·41	— 1
,,	,, ...	Sevenoaks (Riverhead Vic.) ...	28·37	23·28	5·09	— 18
,,	Sussex, West...	Chichester (Chilgrove)	32·83	37·48	4·65	+ 14
,,	,, East ...	Maresfield (Forest Lodge).....	31·41	29·92	1·49	— 5
,,	Hampshire.....	Isle of Wight (Osborne)	27·29	29·92	2·63	+ 10
,,	,, ...	Christchurch (Mudeford)	27·01	29·46	2·45	+ 9
,,	,, ...	Alresford (Ovington).....	31·02	31·40	·38	+ 1
,,	Berkshire	Newbury (Welford Park) *n.g.*	30·27	30·60	·33	+ 1
III.	Hertfordshire..	Hertford (Bayfordbury)	25·04	22·49	2·55	— 10
,,	Buckingham ...	Slough (Langley)	24·37	23·65	·72	— 3
,,	,, ...	Winslow (Addington Manor) ..	27·97	28·68	·71	+ 3
,,	Oxfordshire ...	Oxford (Magdalen Coll.)	26·19	24·51	1·68	— 6
,,	Northampton.	Wellingboro'(Croyland Abbey)	28·67	23·70	4·97	— 17
,,	Bedfordshire...	Bedford (Milton Ernest)	23·87	26·81	2·94	+ 12
,,	Cambridgeshire	Ely (Stretham)	22·39	16·73	5·66	— 25
,,	,, ...	Wisbech (Bank House).....	25·27	21·94	3·33	— 13
IV.	Essex	Chelmsford (High Street).....	23·01	22·98	·03	— 0
,,	,, ...	Saffron Walden (Newport) ...	24·82	25·38	·56	+ 2
,,	Suffolk	Rendlesham Hall	24·83	18·95	5·88	— 24
,,	,, ...	Ixworth(Walsham-le-Willows)	26·13	21·79	4·34	— 17
,,	Norfolk	Rushall Vicarage	25·44	23·82	1·62	— 6
,,	,, ...	Sprowston (Oak Lodge).....	26·11	21·60	4·51	— 17
,,	,, ...	Swaffham (Dunham)	28·76	24·25	4·51	— 16
,,	,, ...	Hillington School	28·10	26·25	1·85	— 7
V.	Wilts	Salisbury Plain (Chitterne Ho.)	28·26	30·11	1·85	+ 7
,,	,, ...	New Swindon	28·38	29·63	1·25	+ 4
,,	Dorset.....	Beaminster Vicarage.....	38·47	36·95	1·52	— 4
,,	Devon.....	Ashburton (Druid House).....	51·28	56·49	5·21	+ 10
,,	,, ...	Polapit Tamar.....	38·18	43·36	5·18	+ 14
,,	,, ...	Bampton (Huntsham)	44·52	53·00	8·48	+ 19
,,	,, ...	Barnstaple (Arlington Court)..	52·85	58·63	5·78	+ 11
,,	Cornwall	Marazion.....	38·68	43·94	5·26	+ 14
,,	,, ...	St. Austell (Trevarna)	47·10	51·11	4·01	+ 9
,,	Somerset	Glastonbury (Street).....	31·16	30·16	1·00	— 3
VI.	Gloucestershire	Clifton (Pembroke Road)	36·08	37·85	1·77	+ 5
,,	,, ...	Stroud (Upfield).....	30·91	33·20	2·29	+ 7
,,	Hereford	Ross (The Graig)	31·18	30·51	·67	— 2
,,	,, ...	Kington (Lynhales)	35·32	33·24	2·08	— 6
,,	Shropshire.....	Bishop's Castle (Castle Street).	34·08	28·02	6·06	— 18

ENGLAND & WALES.—*Continued.*

DIV.	COUNTY.	STATION.	Average, 1880-9.	Depth in 1897.	Difference from average, 1880-9.	
					Amount.	Per cent.
			in.	in.	in.	
VI.	Shropshire.....	Shifnal (Haughton Hall)	28·54	26·30	2·24	— 8
,,	,, ...	Adderley Rectory	28·80	25·15	3·65	— 13
,,	Stafford	Dennis [Stourbridge]	28·07	26·34	1·73	— 6
,,	,, ...	Burton (Shobnall)	25·86	23·72	2·14	— 8
,,	,, ...	Cheadle (The Heath House) ...	32·71	32·82	·11	+ 0
,,	Worcester	Northwick Park	30·09	30·02	·07	— 0
,,	,, ...	Grt. Malvern (Church Street).	29·49	29·05	·44	— 1
,,	Warwick	Shipston (Compton Wynyates)	28·67	26·28	2·39	— 8
,,	,, ...	Coventry (Priory Row)	28·94	28·19	·75	— 3
VII.	Leicester	Thornton Reservoir	27·69	25·36	2·33	— 8
,,	Rutland.....	Market Overton	28·54	23·02	5·52	— 19
,,	Lincoln	Stubton [Newark].....	27·44	21·48	5·96	— 22
,,	,, ...	Horncastle (Bucknall)	25·96	22·89	3·07	— 12
,,	,, ...	Brigg	27·22	25·28	1·94	— 7
,,	Nottingham ...	Worksop (Hodsock Priory) ...	25·84	22·55	3·29	— 13
,,	Derby	Matlock Bath	36·62	33·01	3·61	— 10
VIII.	Cheshire.....	Chester Nurseries	29·08	23·39	5·69	— 20
,,	,, ...	Chelford (Astle Hall).....	30·73	29·94	·79	— 3
,,	,, ...	Torrside Reservoir.....	44·65	41·34	3·31	— 7
,,	Lancashire.....	Ormskirk (Rufford)	31·86	34·68	2·82	+ 9
,,	,, ...	Over Darwen (St. James's Vic.)	46·56	52·59	6·03	+ 13
,,	,, ...	Kirkham (Weeton)	37·04	39·38	2·34	+ 6
,,	,, ...	Cartmel (Holker)	42·25	45·51	3·26	+ 8
IX.	York, W. Ridng.	Wakefield Prison	28·02	24·95	3·07	— 11
,,	,, ,, ...	Knaresborough (Farnham) ...	27·37	24·79	2·58	— 9
,,	,, ,, ...	Malham Tarn.....	57·71	62·73	5·02	+ 9
,,	,, E. Riding.	Pocklington (Warter)	30·46	28·85	1·61	— 5
,,	,, N. Riding.	Old Malton	26·90	24·32	2·58	— 10
,,	,, ,, ...	Bedale (Thorpe Perrow)	27·75	22·85	4·90	— 18
,,	,, ,, ...	Guisborough (Hutton Hall) ...	33·97	27·09	6·88	— 20
X.	Durham.....	Darlington (South End)	26·45	23·80	2·65	— 10
,,	,, ...	Wolsingham	35·27	30·81	4·46	— 13
,,	Northumberlnd	Haltwhistle (Unthank Hall)...	35·97	36·08	·11	+ 0
,,	,, ...	Rothbury (Cragside)	34·03	32·08	1·95	— 6
,,	,, ...	Pawston [Coldstream]	30·00	29·59	·41	— 1
,,	Cumberland ...	Borrowdale (Seathwaite) *4in.g.*	129·00	147·66	18·66	+ 14
,,	,, ...	Carlisle Cemetery	30·34	33·44	3·10	+ 10
,,	Westmoreland.	Kirkby Stephen	39·62	49·02	9·40	+ 24
XI.	Monmouth.....	Abergavenny (Larchfield).....	38·65	42·10	3·45	+ 9
,,	Glamorgan.....	Cardiff Castle.....	39·55	43·72	4·17	+ 11
,,	,, ...	Neath	50·13	57·60	7·47	+ 15
,,	Carmarthen ...	Llandilo (Dynevor Castle) ...	51·17	57·20	6·03	+ 12
,,	Pembroke	Pembroke (Stackpole Court) ..	41·59	43·29	1·70	+ 4
,,	,, ...	Castle Malgwyn [Llechryd] ..	45·29	47·16	1·87	+ 4
,,	Brecknock	Brecknock (Cantreff) .....*o.g.*	51·27	54·19	2·92	+ 6
,,	Radnor	Rhayader (Nantgwillt) ...*o.g.*	62·80	60·04	2·76	— 4
,,	Montgomery ...	Churchstoke (Mellington Hall)	32·07	27·19	4·88	— 15

ENGLAND & WALES.—*Continued.*

DIV.	COUNTY.	STATION.	Average, 1880-9.	Depth in 1897.	Difference from average, 1880-9. Amount.	Per cent.
			in.	in.	in.	
XI.	Denbigh	Colwyn (Nant-y-Glyn)	31·55	29·55	2·00	— 6
,,	Merioneth	Llanderfell (Palé)	47·47	48·31	·84	+ 2
,,	Carnarvon	Llanystumdwy (Talarvor)	36·53	37·56	1·03	+ 3
,,	Anglesea	Llanerchymedd Lwdiarth Esgob	36·63	38·79	2·16	+ 6
,,	Isle of Man	Douglas (Victoria Road)	40·60	44·77	4·17	+ 10
,,	Scilly	St. Mary's	32·42	35·73	3·31	+ 10

SCOTLAND.

XII.	Kirkcudbright.	Dalbeattie (Colvend Manse)	36·08	36·60	·52	+ 1
,,	,,	Gatehouse (Cally)	49·15	54·38	5·23	+ 11
,,	,,	Cargen [Dumfries]	39·74	49·48	9·74	+ 25
,,	Dumfries	Langholm (Ewes School)	52·81	58·25	5·44	+ 10
,,	,,	Moffat (Ericstane)	52·63	68·55	15·92	+ 30
,,	Roxburgh	St. Boswells (Elliston)	28·73	27·47	1·26	— 4
XIII.	Berwick	Marchmont House	34·01	29·00	5·01	— 15
,,	Haddington	Haddington Asylum	26·24	23·77	2·47	— 9
,,	Edinburgh	Pentland Hills (Glencorse)	39·21	35·20	4·01	— 10
XIV.	Lanark	Biggar (Cambus Wallace)	29·98	33·03	3·05	+ 10
,,	,,	Airdrie (Hillend Res.)	35·80	36·70	·90	+ 3
,,	Ayr	Girvan (Pinmore)	48·25	48·64	·39	+ 1
,,	,,	Kilmarnock (North Craig)	35·77	42·25	6·48	+ 18
,,	,,	Ardrossan (Kirkhall)	34·92	38·51	3·59	+ 10
,,	Renfrew	Gorbals W.W. (Waulk Glen)	43·32	53·10	9·78	+ 23
XV.	Dumbarton	Arrochar	74·10	70·25	3·85	— 5
,,	Stirling	Stirling (Polmaise Gardens)	33·79	37·68	3·89	+ 12
,,	Bute	Rothesay (Barone Cottage)	46·04	44·72	1·32	— 3
,,	Argyll	Appin (Airds)	53·62	53·75	·13	+ 0
,,	,,	Strontian (Laudale)	78·71	58·38	20·33	— 26
,,	,,	Tarbert (Stonefield)	69·63	70·35	·72	+ 1
,,	,,	Islay (Ardbeg)	45·25	40·44	4·81	— 11
,,	,,	Mull (Quinish)	57·28	52·32	4·96	— 9
XVI.	Perth	Bridge of Turk	66·09	64·50	1·59	— 2
,,	,,	Crieff (Ochtertyre)	40·30	44·55	4·25	+ 11
,,	,,	Dalnaspidal	57·61	69·01	11·40	+ 20
,,	Forfar	Broughty Ferry (Douglas Ho.)	27·27	27·67	·40	+ 1
XVII.	Kincardine	Fettercairn (The Burn)	33·07	35·60	2·53	+ 8
,,	Aberdeen	Braemar	35·57	36·76	1·19	+ 3
,,	,,	Cromar (Logie Coldstn. Manse)	28·62	29·59	·97	+ 3
,,	,,	Old Deer	30·57	30·61	·04	+ 0
,,	Banff	Keith	29·98	29·93	·05	— 0
,,	Elgin	Grantown	28·65	28·19	·46	— 2
,,	Nairn	Nairn (School House)	22·61	19·20	3·41	— 15
XVIII.	Ross, West	Strathconan [Beauly]	49·76	51·32	1·56	+ 3
,,	,,	Braemore House	57·94	60·32	2·38	+ 4

SCOTLAND—*Continued.*

DIV.	COUNTY.	STATION.	Average 1880-9.	Depth in 1897.	Difference from average 1880-9.	
					Amount.	Per cent.
			in.	in.	in.	
XVIII.	Ross, East	Alness (Ardross Castle)	35·31	30·98	4·33	— 12
,,	Inverness, West	Glenquoich	102·64	105·89	3·25	+ 3
XIX.	Sutherland	Invershin	31·50	31·43	·07	— 0
,,	,,	Golspie, H.R.S.	30·47	22·13	8·34	— 27
,,	Caithness	Watten	27·01	22·99	4·02	— 15
,,	Orkney	S. Ronaldshay (Roeberry)	31·61	32·16	·55	+ 2

IRELAND.

XX.	Cork	Cork (Roche's Point)	46·46	48·18	1·72	+ 4
,,	Kerry	Kenmare (Derreen)	67·99	72·63	4·64	+ 7
,,	Waterford	Waterford (Brook Lodge)	38·31	47·00	8·69	+ 23
,,	,,	Glenam [Clonmel]	42·15	45·88	3·73	+ 9
,,	Tipperary	Derry Castle [Killaloe]	46·33	56·75	10·42	+ 22
,,	Limerick	Pallaskenry (Kilcornan)	30·76	38·23	7·47	+ 24
,,	Clare	Miltown Malbay	44·12	60·79	16·67	+ 38
XXI.	Wexford	Enniscorthy (Ballyhyland)	42·80	50·01	7·21	+ 17
,,	,,	Gorey (Courtown House)	35·39	38·48	3·09	+ 9
,,	Kilkenny	Inistioge (Woodstock)	41·67	52·22	10·55	+ 25
,,	Wicklow	Bray (Fassaroe)	43·28	44·01	·73	+ 2
,,	Carlow	Carlow (Browne's Hill)	33·59	39·48	5·89	+ 18
,,	King's Co.	Parsonstown (Birr Castle)	32·22	37·98	5·76	+ 18
,,	Dublin	Dublin (FitzWilliam Square)	27·47	29·34	1·87	+ 7
,,	West Meath	Athlone (Twyford)	38·97	42·08	3·11	+ 8
,,	,,	Mullingar (Belvedere)	34·69	42·76	8·07	+ 23
,,	Louth	Dundalk (Farndreg)	29·30	33·36	4·06	+ 14
,,	Longford	Edgeworthstown (Currygrane)	35·43	41·90	6·47	+ 18
XXII.	Galway	Ahascragh (Clonbrock)	39·91	45·32	5·41	+ 14
,,	,,	Tuam (Gardenfield) ..... 1 ft.	44·28	48·98	4·70	+ 11
,,	Mayo	Crossmolina (Enniscoe)	51·41	56·38	4·97	+ 10
XXIII.	Armagh	Armagh Observatory	32·16	35·07	2·91	+ 9
,,	Down	Warrenpoint (Summer Hill)	37·88	42·75	4·87	+ 13
,,	,,	Seaforde	37·89	39·58	1·69	+ 4
,,	,,	Banbridge (Milltown)	31·44	32·81	1·37	+ 4
,,	,,	Donaghadee	31·58	34·13	2·55	+ 8
,,	Antrim	Belfast (Antrim Road)	34·57	38·48	3·91	+ 11
,,	,,	Ballymena (Harryville)	39·41	41·46	2·05	+ 5
,,	,,	Bushmills (Dundarave)	37·87	37·94	·07	+ 0
,,	Londonderry	Garvagh (Moneydig)	39·02	39·39	·37	+ 1
,,	,,	Londonderry (Creggan Res.)	40·78	40·62	·16	— 0
,,	Tyrone	Stewartstown (The Square)	34·90	39·85	4·95	+ 14
,,	,,	Omagh (Edenfel)	36·63	46·31	9·68	+ 26
,,	Donegal	Buncrana (Rockfort)	40·71	41·04	·33	+ 1
,,	,,	Moville (Prospect Villa)	41·23	42·55	1·32	+ 3

RELATION OF RECENT YEARS TO THE AVERAGE.

	Years.....	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.
	ENGLAND AND WALES.								
I.	London, Camden Square.....	d	w	d	d	w	d	...	d
II.	Tenterden	...	...	...	...	w	d	...	d
,,	Isle of Wight, Osborne	d	W	d	d	W	...	...	w
,,	Newbury, Welford Park	d	W	d	d	W	...	...	...
III.	Wisbech, Bank House.....	d	...	..	d	...	d	...	d
IV.	Saffron Walden, Newport	...	w	...	d	...	...	...	...
,,	Sprowston	...	...	w	d	...	...	...	d
V.	Barnstaple, Arlington Court	...	...	d	...	w	...	d	w
,,	Marazion	...	w	d	d	w	...	d	w
,,	Glastonbury, Street.....	d	...	D	D	w	...	D	...
VI.	Kington, Lynhales	D	..	D	d	w	d	D	...
,,	Adderley Rectory	...	w	w	D	d	d	d	d
,,	Burton, Shobnall	D	...	d	D	d	d	d	...
,,	Northwick Park	D	...	D	D	d	d	d	...
,,	Coventry, Priory Row.....	d	...	d	D	...	d	d	...
VII.	Stubton [Newark].....	D	...	d	D	d	d	d	d
VIII.	Ormskirk, Rufford	...	w	w	..	...	d	...	...
IX.	Knaresborough, Farnham	d	...	...	D	w	w	d	...
,,	Pocklington, Warter	d	...	...	d	...	w	d	...
X.	Darlington, South End	...	...	...	D	...	w	d	d
,,	Pawston [Coldstream]	...	...	...	d	...	w	w	...
,,	Borrowdale, Seathwaite	w	w	...	...	w	d	...	w
XI.	Abergavenny, Larchfield	D	w	d	d	w	...	d	...
,,	Pembroke, Stackpole Court	d	...	d	D	...	d	d	...
,,	Rhayader, Nantgwillt.....	d	w	D	d	...	d	d	...
,,	Landerfel, Palé.....	d	w	d	d	...	...	d	...
,,	Llanerchymedd, Llwydiarth Esgob ...	w	w	w	d	w	...	...	...
,,	Douglas, Victoria Road	...	w	...	d	w	d	...	w
	SCOTLAND.								
XII.	Gatehouse, Cally	...	...	...	d	...	d	...	w
,,	Moffat, Ericstane	d	...	d	...	w	d	d	W
XIV.	Gorbals W.W., Waulk Glen	w	w	w	...	W	d	...	w
XV.	Mull, Quinish	w	...	...	...	...	d	...	...
XVI.	Bridge of Turk	...	...	...	d	...	D	d	...
,,	Dalnaspidal	w	...	...	...	w	...	...	w
,,	Broughty Ferry.....	...	...	...	d	...	...	d	...
XVII.	Keith	w	...	w	w	w	w	w	...
,,	Nairn, School House	w	...	w	w	w	w	...	d
XVIII.	Braemore House	w	...	...	w	...	...	w	...
XIX.	South Ronaldshay	...	...	w	w	d	...	w	...
	IRELAND.								
XX.	Kenmare, Derreen	...	...	...	d	...	...	d	...
,,	Waterford, Brook Lodge	...	w	d	D	w	w	...	w
,,	Derry Castle.....	...	...	...	d	w	d	...	w
,,	Miltown Malbay	w	...	...	d	...	d	...	W
XXI.	Gorey, Courtown House.....	d	w	...	D	...	...	d	...
,,	Currygrane	...	...	...	d	...	d	...	w
XXII.	Tuam, Gardenfield	d	...	...	d	...	d	...	w
,,	Enniscoe	...	...	...	d	W	...	...	w
XXIII.	Seaforde.....	d	...	...	D	...	...	...	...
,,	Ballymena.....	...	...	...	...	...	...	...	...
,,	Omagh, Edenfell	...	w	...	...	w	...	...	W

EXTREMES OF RAINFALL IN 1897.

Largest Rainfall, at The Stye, Cumberland ..... 197·39 in.
Least Rainfall, at Grange Hall, Forres, Elgin ..... 15·92 ,,

ENGLAND.

Greatest.			Least.		
Div.		in.	Div.		in.
X.	The Stye, C	197·39	II.	Dungeness.....	16·17
,,	Seathwaite (4-*inch gauge*).....	147·66	IV.	Shoeburyness	16·70
,,	Styehead Tarn	144·50	,,	Ellingham [Beccles].....	17·69
,,	Mickleden.....	137·63	,,	Grays.....	18·02
,,	Sprinkling Tarn	137·25	III.	Biggleswade (Caldecote).....	18·14
,,	Ullscarf.....	136·70	II.	Herne Bay (Water Works)...	18·67

MONMOUTH, WALES AND THE ISLANDS.

Greatest.			Least.		
Div.		in.	Div.		in.
XI.	Bl. Ffestiniog (New Welsh Qy.)	115·82	XI.	Llandwyn Island	22·07
,,	Garthbibio (Bwlch Tomlyd)...	112·40	,,	Rhyl (Sedgley House).....	22·93
,,	Treherbert (Bute Colliery) ...	107·31	,,	St. Asaph (Nantllys)	23·69
,,	Taff Fechan (Neuadd Res.) No. 6.....	101·54	,,	Rosset (Trevalyn Hall)	24·29
,,	Rhiwbryfdir=Oakley Quarries	100·48	,,	Llanefydd (Rhyl W. W., E.)	24·44
,,	Treherbert (Tyn-y-waun) M.	99·82	,,	Meifod (Tan-y-fron)	25·21

SCOTLAND.

Greatest.			Least.		
Div.		in.	Div.		in.
XVIII.	Ben Nevis Observatory	155·78	XVII.	Forres (Grange Hall)	15·92
,,	Glenquoich	105·89	XVIII.	Fearn (Lower Pitkerrie).....	16·61
,,	Loch Shiel (Glenaladale) ...	102·97	,,	,, (Geanies Mains)	17·46
XV.	Glengyle	96·10	XVII.	Forres, H.R.S.....	17·68
XVI.	Balquhidder (Blaircreach)...	91·02	,,	Nairn (Achareidh)	17·90
XV.	Loch Eck (Benmore)	90·07	,,	Kinloss	18·34

IRELAND.

Greatest.			Least.		
Div.		in.	Div.		in.
XX.	Gap of Dunloe (Garrymeen)	89·75	XXIII.	Banbridge (Katesbridge)	28·97
XXII.	Clifden (Kylemore House)...	88·58	XXI.	Rathmines (Terenure)	29·04
XX.	Dunmanway (Coolkelure) ..	84·87	,,	Dublin (Fitz William Square)	29·34
,,	Inagh (Mount Callan).....	72·94	,,	Balbriggan (Laragh).....	29·56
,,	Kenmare (Derreen)	72·63	,,	Rathmines (Leinster Road)..	29·57
XXII.	Clifden (Kylemore Castle)...	70·78	XXIII.	Banbridge (Corbet Reservoir)	29·85

NOTE.

Second gauges, and those at Lighthouses, are excluded from the above, and in selecting the minima, no record is used from any gauge of which the receiving surface is more than 3 ft. above the ground.

NOTES ON THE TABLE OF EXTREMES OF RAINFALL.

WE mentioned last year the rules upon which entries for this table are selected—briefly (*a*) not more than one from any single station; (*b*) none with a ?; (*c*) no "least" at which the mouth of the gauge is more than 3 ft. above the ground.

Naturally some records nearly always appear in this table; the English group of "greatest" this year is thoroughly typical. The amounts are large, because, as shown, on p. [147] the rainfall in the Lake District was 14 per cent. above the average,—but they are far from being unprecedented. In 1872 the fall on The Stye was 243·98 in., and at Taylor's Gill, 224·73 in.

The minima vary much more in locality. In 1896 the English ones were mostly near the river Severn; in 1897 they were scattered. The Kent drought has sent the exposed station at Dungeness down to the English minimum, the others are mostly near the mouth of the Thames; but Caldecote, Biggleswade, which had no companion in 1896, is in the same position in 1897.

The Welsh maxima are much scattered,—there are two from the Snowdon district, two from Glamorgan, and two which may be regarded as from Central Wales. The minima are as usual mostly from the North.

For Scotland, we have, as usual, for maxima, first the regular trio of Ben Nevis, Glenquoich and Glenaladale, and then three other Western stations. The minima are, as usual, entirely on the N.E.

As the Mangerton return has been obliged to be entered with a ? (113·00 ?) we have its close neighbour, Gap of Dunloe, at the head of the Irish returns, which, as usual, are wholly from the west, just as the dry ones are all from the east, and most of them from the vicinity of Dublin.

GENERAL TABLES

OF

TOTAL RAINFALL IN 1897,

AT MORE THAN

3000 STATIONS

IN THE

BRITISH ISLES.

EXPLANATION OF THE ARRANGEMENT OF THE FOLLOWING GENERAL TABLES.

The divisions are the same as those adopted by the Registrars General of England and Scotland, and the counties follow the same order as in the reports of those officers; but an alphabetical list of the counties is given, whereby the page or pages on which all returns from each county will be found, can be at once ascertained.

The stations in each county are arranged nearly in the order of their latitude from South to North.

To facilitate finding the locality of any gauge, the first name is almost always that of a place given in *Bradshaw*, the *Post Office Guide*, or the *Clergy Directory*; the second name is generally added to fix accurately the site of Observation; but, in a very few instances, when in [ ] instead of ( ), it is that of the nearest town in an adjoining county; *e.g.*, "Haslemere (Weycombe)" means Weycombe near Haslemere, both in one county; but "Geldeston [Beccles]" means Geldeston, Norfolk, near Beccles, in another county—Suffolk.

The contents of the columns are sufficiently explained by the headings, except that in that headed "diameter," figures will be noticed of old-style type; these figures indicate the length of the sides of rectangular mouthed gauges. These measurements are all in inches.

The letter D denotes that a copy of the daily record has been received, that it is perfect throughout the year, and that the printed amount is the correct total of these daily entries. The letter M indicates that the gauge is read only on the first of each month.

A few entries of total rain will be found in italics—indicating uncertainty either as to possible overflow, or as to the measurement of snow.

An asterisk * denotes that the gauge was tested before erection, and a † that it has been visited and examined since. A note of interrogation (?) implies doubt, not necessarily error. ... indicates the absence of information.

In the column of altitudes several symbols are used, their meaning is as follows:—Ⱦ, that a series of levels has been taken from the gauge to an Ordnance bench mark; T, that the height is estimated or ascertained approximately from the same source; L, that levels have been taken from the gauge to the sea, or to some datum other than Ordnance mean sea level; B, that the altitude has been taken by the barometer; and ?, that the height is uncertain.

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ENGLAND AND WALES.

DIVISION I.—MIDDLESEX.

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
	MIDDLESEX.							
D	Hampton (Southwark W. W.)...	J.W.Restler, Esq.,C.E.	5	2	0	...	21·83	118
D	Sunbury (Hanworth Road)	W.B.Bryan, Esq., C.E.	8	1	0	50 ↑	23·70	181
	Teddington (Gomer House)	R. D. Blackmore, Esq..	5	0	10	26 ↑	25·13	159
D	Staines (Belle Vue)	J. Gundry, Esq.....	5	1	0	51 ↑	23·36	165
	,, (Cambria House)	C. Ashby, Esq.	5	1	0	50?	22·34	123
	,, (Knowle Green).....	Miss Pellatt	5	5	2	...	23·88	143
	Twickenham (Hampton Road)..	T. Gale, Esq.	5	1	3	37 ↑	21·65	149
D	,, (Manor Road) ...	G. B. Laffan, Esq., C.E.	5	1	9	56 ↑	22·72	185
D	,, (Sewage Works)...	,, ,, ,, ...	5	1	6	36 ↑	20·68	148
	,, (,, ,,) M	,, ,, ,, ...	5	1	6	36 ↑	20·38	...
	Isleworth (Spring Grove House).	Mr. W. Farr	5	1	0	...	22·50	...
D	,, (Warkworth House)...	W. H. Odlum, Esq. ...	5	0	6	...	21·65	135
D	Chelsea (Pumping Station)	Sir A. R. Binnie, C.E...	8	1	0	19 ↑	22·15	149
D	,, (St. Luke's Gardens) ...	TWE.Higgens, Esq. CE	5	1	0	25 ↑	22·63	164
D	Isle of Dogs	Sir A. R. Binnie, C.E....	8	1	0	15 ↑	21·05	152
D	Gunnersbury Station	E. Mann, Esq.	5	0	11	35	21·84	151
D	Acton (Newburgh Road)	Miss Baker	5	1	0	86 ↑	25·02	153
	Ealing (Public Buildings).....	C. Jones, Esq., C.E. ...	5	9	0	114	23·99	157
	,, (Gordon Road)	J. Box, Esq.	5	10	0	85 ↑	23·19	159
	,, (Castle Bar Road).....	T. Simpson, Esq.	5	1	0	152	24·73	...
	Westminster (Spring Gardens)(3)	Sir A. R. Binnie, C.E...	8	6	0	35 ↑	20·60	...
	,, (,, ,,)(1)	,, ,, ,, ...	8	66	4	95 ↑	20·29	...
	,, (,, ,,)(2)	,, ,, ,, ...	12	65	11	95 ↑	20·13	...
D	Kensington (Edith Road).....	G. von U. Searle, Esq.	5	0	10	16 ↑	22·25	163
D	,, Museum	Genl. Festing, F.R.S..	8	0	8	27 ↑	23·44	168
D	,, (Holland House) ...	Mr. C. Dixon	5	4	6	68 ↑	22·09	159

DIVISION I.—MIDDLESEX.—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	Height Above Ground in.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
	MIDDLESEX—(*con.*)							
D	Kensington (Addison Gardens)...	G. H. M. Whish, Esq..	5	1	1	23 T	23·34	158
D	,, (Campden Hill).....	M.W.Hervey,Esq.,C.E.	8	4	10	130 ⅄	24·06	165
D	London (Westbourne Grove, W.)	A. P. Baker, Esq.	5	0	9	64 T	23·71	154
D	,, (Strand, W.C.).....	J. J. Steward, Esq. ..	5	45	0	80	23·54	146
	,, (Guildhall, E.C.).....	D. J. Ross, Esq., C.E..	8	2	6	49 T	22·30	135
	,, (,, ,,).....	,, ,, ,, ..	8	51	0	98 T	21·74	135
D	,, (Mile End, E.).....	J. Metson, Esq.....	5	14	0	...	23·99	143
	,, (Old Street, E.C.)	The Royal Meteor. Soc.	5	1	0	70 T	23·18	166
	Perivale (Sewage Farm)	C. Jones, Esq., C.E. ...	5	12	0	56	22·42	145
D	London (Gloucester Place W.) ...	W.B.Heberden,Esq.CB	5	4	0	...	22·53	160
D	,, (Regent's Pk.R.Bot.Soc.)	J. B. Sowerby, Esq. ...	8	1	0	126 ⅄	23·98	163
D	,, (Hamilton Terrace).....	Miss Cobb	5	0	11	...	24·37	174
D	,, (Barrow Hill, N.W.) ...	M.W.Hervey,Esq.,C.E.	5	3	4	190 ⅄	21·09	150
D	,, (Old Ford, E.).....	Sir A. R. Binnie, C.E...	8	1	0	35 ⅄	22·17	144
D†	,, (Camden Square, N.W.)	G.J.Symons,Esq. F.R.S	8	0	8	111 ⅄	22·86	164
†	,, (,, ,,)..... M	,, ,, ,, ...	5	1	0	111 ⅄	22·79	...
D	Willesden Green (Strode Road)..	Miss Lamport.....	5	1	0	150	24·20	184
D	Hampstead (Kidderpore Reserv.)	M.W.Hervey,Esq.,C.E.	8	1	6	323 ⅄	26·01	166
†	,, (Squire's Mount) ...	Rogers Field, Esq. C.E.	5	1	0	388 ⅄	22·47	138
	,, (The Pryors).....	,, ,, ,, ,,	5	1	0	327 ⅄	23·63	161
D	Lea Bridge.....	W. B. Bryan, Esq.,C.E.	8	1	0	23 ⅄	22·68	153
D	Upper Clapton	,, ,, ,,	8	1	0	...	25·37	153
D	Stoke Newington (Cazenove Rd.)	E. J. Bentley, Esq. ...	5	0	6	...	27·93	162
D	Finsbury Park(New River Works)	E. L. Morris, Esq., C.E.	5	1	0	101 ⅄	28·51	155
D	Stoke Newington(,, ,, ,,)	J. Francis, Esq., C.E...	5	1	2	102 ⅄	24·49	154
D	Highgate (North Hill)	E.J.Lovegrove,Esq.,CE	5	4	6	302	25·95	162
	†Child's Hill (Helenslea).....	A. J. Woodhouse, Esq.	5	1	6	245 T	23·20	152
	Harrow	T. Charles, Esq.....	5	1	0	215	26·01	173
	Crouch End (Aubrey Road).....	W. B. Butler, Esq. ...	5	1	0	140	26·93	168
D	,, ,, (Fairfield Rd.)*gardn.*	Mrs. Sowerby Wallis...	5	1	0	144 T	27·30	171
	,, ,, (,, ,,)*tennis ct.* M	,, ,, ,, ..	4	1	0	144 T	26·60	...
D	Hornsey (Tottenham Lane)	E.J.Lovegrove,Esq.,CE	8	4	6	157	25·88	141
D	,, (High Street).....	,, ,, ,,	6	3	2	97	26·67	144
D	,, (Burghley Road)	,, ,, ,,	5	4	0	74	23·08	126
D	Muswell Hill	Miss Abethell.....	5	0	10	310 T	26·25	188
D	,, (Irish Corner-Sew.Farm)	E.J.Lovegrove,Esq.,CE	8	4	8	216 ⅄	28·96	174
D	Hendon (Hillwood)	W. H. Kesteven, Esq..	5	1	0	191 ⅄	25·32	178
D†	Finchley (Etchingham Park) ...	J. W. Scott, Esq.	5	1	2	295 T	25·42	171
D†	,, (,, ,,) ...	,, ,, ,, ...	8	1	3	295 T	25·51	171
D	Harrow Weald (Hill House) ...	A. Crossman, Esq.....	5	0	8	280	27·83	189
	Uxbridge (Harefield Park)	Mr. W. Batchelor	5	0	10	...	24·98	136
	Stanmore Observatory	S. T. Klein, Esq.	5	1	0	268	24·81	154
D	Friern Barnet (Sewage Works)..	BaldwinLathamEsq CE	5	1	0	156 ⅄	23·41	155
D	Whetstone	,, ,, ,, ...	5	1	0	315 ⅄	26·76	156
D	Enfield (Old Park)	A. L. Ford, Esq.	5	1	9	156 T	26·55	160
D	,, (Southbury Road).....	J. Francis, Esq., C.E..	5	0	9	106 T	24·23	156
D	Barnet (Trent Park).....	Mr. W. H. Lees.....	5	1	0	254	27·84	130

DIVISION II.—SOUTH EASTERN COUNTIES.

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell
				ft. in.	feet.	inches.	
	SURREY.						
D	Haslemere (Lower Street)	J. W. Penfold, Esq. ...	8	4 0	481 ⊼	36·52	159
D	,, (Hazelhurst)	T. P. Newman, Esq. ...	5	1 0	550 T	36·82	207
	,, (Grayswood Hill) ...	B. E. C. Chambers, Esq.	5	1 0	580 ⊼	32·15	...
D	Chiddingfold	A. F. Parbury, Esq....	5	1 0	174 T	30·86	161
	,, M	,, ,, ,, ...	5	0 10	174 T	30·11	...
D	,, (Beaconscroft)	Adl. Maclear	5	1 0	230	31·00	179
	Dunsfold Rectory	Rev. W. H. Winn	5	1 0	170	28·18	...
	Haslemere (Weycombe)	G.B.Buckton,Esq.FRS.	5	1 0	562 ⊼	30·55	...
D	Hambledon (Matteryes)	J. Borrowman, Esq. ...	5	5 8	300	28·14	189
D	Witley (Fernside)	Mrs. Foster	5	1 0	350 T	28·41	169
	Hascombe Rectory	Rev. Canon Musgrave..	8	1 0	450 T	29·03	...
	,, (Hall Place)	late E.S.Rowcliffe,Esq.	8	2 6	273 ⊼	28·86	...
	Cranleigh Common (Homefield Cott.)	A. F. Jones, Esq.	5	1 2	175	28·12	160
	,, ,,	W. Welch, Esq.	5	1 0	182 ⊼	29·69	...
D	,, (County School)	Admiral Maclear	5	1 0	232 ⊼	26·94	165
D	,, (Winterfold)	Mr. R. Turvey	8	3 6	603 T	28·87	149
D	Ewhurst (Malquoits)	W. Webb, Esq....	5	1 6	400	29·60	184
D	,, (Coneyhurst)	Miss Ewart	8	1 0	561 T	30·28	175
D	,, (Heathside)	J. Sparkes, Esq.	5	1 6	600 ⊼	31·05	127
	,, (Woolpits)	Admiral Maclear	...	...	...	31·88	...
	Felbridge Place	Dr. C. H. Gatty	8	1 0	305	27·34	157
D	Capel (The Cottage)	J. Lee Jardine, Esq. ...	5	1 0	270	28·96	166
	Wonersh (Shamley Green) ...	Mr. A. Nash	5	1 0	400	27·89	174
D	Bramley (Cloverlea)	J. Bartlett, Esq.	5	1 0	147	28·34	167
D	Abinger Rectory	Miss Brodie Hall	5	1 0	381	31·20	156
D	,, Hall	Rt. Hon. Lord Farrer..	8	2 0	320 T	31·29	177
D	Farnham (The Bourne Vicarage)	Rev. T. W. Sidebotham	5	1 0	308 ⊼	27·03	186
D	,, Castle	Mr. H. Dowding	8	1 0	300	25·30	125
D	,, (Hampton Lodge)	Mr. J. Foster	5	1 0	...	29·79	167
D	,, (Great Down, Seale)...	Mrs. Kitchin	8	1 0	490	26·04	138
	Dorking (Fir Tor)	F. Taylor, Esq.	5	1 0	260	30·15	...
	,, (Woodcote)	Stanley Single, Esq...	5	1 0	310 T	30·27	160
D	,, (West Street)	Mrs. W. A. Marsh	10	26 0	224 T	25·86	159
D	,, (The Denbies)	Mr. J. Beesley	5	0 9	610 T	29·77	157
D	Brockham (North Lodge)	H. R. Kempe, Esq. ...	8	0 9	...	27·77	125
D	Guildford (Epsom Road)	Miss Johnston	5	0 11	...	28·59	160
D	,, (Listoke)	Genl. Battersby	5	1 0	...	25·26	149
D	,, (Craigie, Merrow)	Miss Lomer	5	0 9	250 T	27·18	143
D	Reigate (Hartswood)	R. N. Clutton, Esq. ...	5	1 0	174	25·45	177
D	,, (Woodhatch Lodge) ...	T. B. Haywood, Esq...	5	1 0	270 T	25·89	175
D	,, (Ringley Mead)	R. L. Hesketh, Esq. ...	5	1 0	345 T	28·32	180
D	Earlswood (Sewage Farm)	W. H. Prescott, Esq., CE	8	1 0	196 ⊼	24·14	125
D†	Red Hill (Oxford Road)	W. H. Tyndall, Esq....	8	1 0	300 ⊼	28·04	169
D	,, ,, (Trevor Lodge)	W. A. Gunner, Esq....	5	1 0	...	28·34	176
	Reigate (Aldersyde)	H. Rosling, Esq.	5	0 10	...	30·27	144
D	,, (Castle Grounds)	W. H. Prescott, Esq., CE	5	1 6	350 ⊼	26·24	154
D	,, (The Briars)	F. C. Bayard, Esq. ...	5	1 0	430	26·23	172

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	SURREY—(*con.*)						
D	Reigate (Doods)	G. E. Pym, Esq.	5	1 3	350 ⅄	27·09	175
D	,, (Nutwood)	H. E. Gurney, Esq.	5	0 9	440 T	27·26	180
	Nutfield Priory	Mrs. Fielden	8	1 2	468 ⅄	25·03	184
D	,, (Holmesdale)	C. T. Maw, Esq.	8	2 0	500 T	24·65	166
D	Dorking (High Ashurst)	The Hon. H. D. Ryder	5	10 0	550	30·54	175
D	Walton Heath (The Hermitage)	F. C. Bayard, Esq.	5	1 2	650	35·65	164
D	Merstham (Rockshaw)	,, ,, ,,	5	1 0	475	27·73	170
D	,, (Harp's Oak Cottage)	,, ,, ,,	5	1 0	454	29·05	185
D	Upper Gatton	F. Druce, Esq.	5	1 0	601	28·81	191
D	Bookham Lodge	Hon.Rev.HWaldegrave	8	0 7	140	24·31	162
D	Horsley, West	Sir H. E. Roscoe, F.R.S.	7	0 6	240	29·11	115
	,, Towers	Capt.HonLFKing-Noel	8	1 2	300 ⅄	25·78	...
D	,, (Woodcote Lodge)	Sir H. E. Roscoe, F.R.S.	7	0 6	650	30·58	110
D	Pirbright Camp	Sergt. Elwick	5	1 0	201 T	23·35	139
	Leatherhead (Downside)	A. Tate, Esq.	5	1 0	250	27·96	133
D	Chaldon Rectory	F. C. Bayard, Esq.	5	1 0	542	29·78	168
D	Chipstead (Shabden Park)	,, ,, ,,	5	1 0	550	28·27	181
D	Caterham Asylum	Dr. Elliot	5	1 0	610 ⅄	29·86	158
D	Coulsdon Grange	F. C. Bayard, Esq.	5	1 4	525	24·92	161
	Warlingham Vicarage	,, ,, ,,	5	1 0	614	27·10	...
D	Kenley (The Cottage)	J. B. Snell, Esq.	5	1 0	294 T	26·86	179
D	,, Hazelea	Mrs. Carr Dyer	5	1 0	282	27·59	192
D	Ashtead (Caen Leys)	J. D. Robertson, Esq.	8	3 0	185 T	26·07	149
D	,, (D'Abernon Chase)	Sir W. Vincent, Bart.	5	1 0	280 T	25·90	144
D	Pyrford Vicarage	Rev. T. M. Ridsdale	4	0 7	107	21·78	117
D	Horsell (Lindisaye)	H. Horncastle, Esq.	5	3 8	130 T	23·01	172
	,, (,,) M	,, ,, ,,	5	0 9	130 T	23·04	...
D	Oxshott	W. H. Dines, Esq.	5	1 0	206 ⅄	24·41	164
	Banstead (The Larches)	Rev. C. J. Taylor	8	1 0	488 T	29·24	158
D	Camberley (Brackendale)	Mr. J. Bryan	5	1 0	267 T	24·04	174
	Chelsham (Fairchildes)	A. T. Daniell, Esq.	8	1 0	600 T	25·10	...
D	Purley (Tudor Cottage)	F. C. Bayard, Esq.	5	1 0	216 ⅄	28·40	186
	Chobham (The Elms)	Mrs. Brown	5	2 3	98	26·66	164
D	Chertsey (Ottershaw)	R. H. Otter, Esq.	5	1 0	200 T	23·75	178
D	Windlesham (Erlwood)	E. S. Currey, Esq.	5	1 0	216 ⅄	23·06	157
	,, (Woodside)	J. Williams, Esq.	5	0 8	200 ?	23·83	...
D	Weybridge (Field Place)	G. A. Yool, Esq.	5	1 0	119 ⅄	24·44	162
	,, (,, ,,) M	,, ,, ,,	5	1 0	100	24·76	...
	,, (Heath Field)	Miss A. T. Gardiner	5	1 0	...	24·94	159
D	,, (West Oaks)	A. Whittet, Esq.	5	1 0	36 T	26·27	161
D	Esher (Sewage Works)	F. C. Bayard, Esq.	5	1 0	42 ⅄	25·65	173
D	Addington (Hares Bank)	,, ,, ,,	8	1 0	331 ⅄	25·71	181
D	,, (Park Farm)	,, ,, ,,	5	1 0	268 ⅄	25·20	158
D	,, Hills	,, ,, ,,	8	0 9	473 ⅄	24·99	185
D	Wallington	,, ,, ,,	5	4 1	140 ⅄	23·26	161
	Sutton (Sewage Works)	C. C. Smith, Esq.	8	1 0	94 ⅄	24·11	142
†	,, (Mulgrave Road)	W. Goode, Esq.	5	5 10	230 ⅄	25·10	171
	Beddington (Riverside)	The Royal Meteor. Soc.	5	1 0	120	24·12	160

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground		Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft.	in.	feet.	inches.	
	SURREY—(*con.*)							
	Croydon (Heathfield Road)	J. Glaisher, Esq., F.R.S.	8	0	5	185	24·05	146
D	,, (Duppas House)	Baldwin Latham Esq CE	5	1	0	158	23·96	162
D	,, (Waddon House)	P. Crowley, Esq.	5	1	0	156 ⇑	23·95	181
D	,, (Waddon New Road)	G. Corden, Esq.	5	1	0	146	23·93	176
D	,, (The Whitgift)	F. C. Bayard, Esq.	5	1	0	191 ⇑	25·21	179
D	,, (Woburn Road)	,, ,, ,,	5	1	1	178	25·20	181
D	,, (Brimstone Sew. Works)	,, ,, ,,	5	1	0	130 ⇑	22·43	137
D	,, (Park Hill Rise)	H. F. Parsons, Esq., M.D.	5	1	3	240	23·55	171
D	Worcester Park (Parkside)	F. L. Sutton, Esq.	5	1	0	80	24·07	152
D	New Malden (Sewage Works)	F. C. Bayard, Esq.	5	1	0	45	26·64	138
D	Thornton Heath (Thornton Rd.)	A. Wright, Esq.	8	0	9	130	23·33	128
	Chertsey (Flutters Hill)	F. A. Baker, Esq.	5	3	0	200	20·73	101
	,, (Burley Orchard)	W. A. Herring, Esq.	5	1	6	30	28·75?	...
D	Thames Ditton (Weston Green)	Mr. T. H. Potter	8	1	0	34 ⇑	23·69	150
	,, ,, (Giggs Hill)	W. A. Hardwick, Esq.	5	1	2	35 ⇑	24·59	153
	Surbiton (Seething Wells)	R. Hack, Esq., C.E.	10	0	6	25	24·43	151
D	East Molesey (Palace Road)	Lady Jenkyns	5	5	0	37	24·59	186
	West Molesey	R. Hack, Esq., C.E.	5	1	0	32	24·32	152
D	St. Ann's Heath (Sanatorium)	Rev. J. Peck	8	1	1	120	22·94	159
D	Kingston Sewage Works	F. C. Bayard, Esq.	5	1	0	25	25·55	161
D	Wimbledon (Mount Ararat)	T. Devas, Esq.	12	3	0	157 ⇑	24·10	164
D	,, (Raynes Park)	F. C. Bayard, Esq.	5	1	0	47	26·94	205
D	,, (Sewage Works)	,, ,, ,,	5	1	0	58 ⇑	23·03	176
D	,, Common (Richmond Ho.)	E. Rawlings, Esq.	5	1	3	175 ⇑	25·38	168
D	,, Park (Woodhouse)	A. E. Bateman, Esq.	5	0	11	150	24·73	127
D	South Norwood (Apsley Road)	F. C. Bayard, Esq.	5	1	0	125	22·97	144
D	West Norwood (Thornlaw Road)	W. Marriott, Esq.	8	1	0	221	25·82	177
	Streatham (Woodfield Avenue)	F. Jordan, Esq.	5	1	0	120 ⇑	24·20	178
D	Dulwich Wood Park	T. P. Caldicott, Esq.	5	1	2	...	24·51	152
D	Wandsworth Com. (Patten Rd.)	F. C. Bayard, Esq.	5	1	0	100	23·75	172
	Putney Heath	R. Hack, Esq., C.E.	5	1	6	180 ⇑	23·30	164
D	Richmond (Ormond Lodge)	J. T. Billett, Esq.	5	0	9	51	23·98	177
D	Kew Observatory	The Kew Committee	11	1	9	19 ⇑	21·84	155
	Putney Vale Cemetery	Mr. F. Pain	5	1	0	84 ⇑	22·72	149
D	Clapham Park (New Park Road)	D. W. Horner, Esq.	5	1	3	128 ⇑	23·25	153
	Brixton (Acre Lane)	The Meteor. Council	8	1	0	77 ⇑	23·33	168
D	Nunhead (Southwark W. W.)	J. W. Restler, Esq., C.E.	5	4	0	176	19·26	126
D	Battersea Creek (York Road)	Sir A. R. Binnie, C.E.	8	26	9	41 ⇑	19·93	139
D	,, (Southwark W. W.)	J. W. Restler, Esq., C.E.	5	3	6	21	18·60	128
D	Vauxhall Cross (Wandsworth Rd.)	Sir A. R. Binnie, C.E.	8	30	5	48 ⇑	20·14	143
	KENT.							
	Dungeness	The Meteor. Council	8	1	3	75 ⇑	16·17	161
	Wittersham	J. Body, Jun., Esq.	5	3	2	156	25·58	...
D	Hawkhurst (Sandhurst Rectory)	Rev. G. Ridout	5	1	3	208 ⇑	27·96	159
	Appledore (Snargate)	J. Ellis Mace, Esq.	5	1	0	9	19·91	...
	Dymchurch Rectory	Rev. C. E. Plater	8	1	6	5	23·23	...
	Tenterden (Summerhill)	Rev. A. Wilkin	12	1	0	149 ⇑	20·70	176

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1897	Days on which '01 or more fell.
			ft. in.	feet.	inches.	
KENT—(*con.*)						
Benenden (East End)	J. Ellis Mace, Esq.	8	1 2	193 ↟	25·01	...
D Tenterden	,, ,, ,,	8	1 5	190 ↟	25·50	198
,, ... *Snowdon*	,, ,, ,,	8	1 5	190 ↟	25·05	...
,, (Little Westwell) ...	W. Hilder, Esq.	5	1 0	140 ↾	25·20	...
,, (Ashbourne Mills) ...	A. Pinyon, Esq.	5	1 0	45	24·92	...
D Woodchurch	Rev. A. Welch	5	5 0	107	23·22	130
D† Hythe	Messrs. Mackeson & Co.	8	0 6	12 ↾	26·58	191
,, (Saltwood)	Rev. H. M. Spooner ...	8	2 6	200 ↾	25·82	146
† ,, (Hillhurst Farm)	G. F. Deedes, Esq. ...	5	2 0	280 ↾	29·34	197
D Sandgate	A. R. Bowles, Esq., C.E.	5	1 0	56 ↟	24·54	148
Cranbrook (Swattenden)	Miss Appach	8	1 2	350 ↾	25·44	157
† ,, (Hartley)	G. Pile, Esq.	5	4 0	405 ↾	27·29	188
Goudhurst (Scotney Castle)	E. W. Hussey, Esq.	5	4 0	241	25·99	.
†Folkestone (Sanatorium)	The Royal Meteor. Soc.	5	1 0	110	24·55	151
D† ,, (Radnor Park)	J. W. Stainer, Esq. ...	5	1 0	129 ↾	25·81	167
D† ,, (Cherry Gardens) ...	H. Turner, Esq.	8	3 6	140 ↟	25·39	159
† ,, (Capel Lodge)	E. Norton, Esq., M.D..	5	1 0	480 ↾	27·59	174
D Hythe (Frogholt)	G. Lipscomb, Esq.	5	1 0	186 ↾	27·78	138
† ,, (Paddlesworth)	Mrs. Dixon	8	1 0	608 ↟	36·39	...
D† Dover (Water Works)	H. E. Stilgoe, Esq., C.E.	5	1 6	189 ↾	23·79	152
†Kearsney Abbey	Mr. E. Cartwright.. ...	5	1 0	94 ↾	28·89	...
Acrise Place	Miss Mackinnon	5	1 0	484 ↟	35·15	...
D† ,, (School House)	G. C. Woollett, Esq. ..	8	1 0	504 ↟	36·42	160
D Ashurst (Stone Ness)	S. Poyntz Wright, Esq.	5	1 0	320 ↾	27·98	185
D Tunbridge Wells (Camden Park)	J. Weston, Esq.	5	0 9	424 ↟	27·20	172
D ,, ,, (BelvedereTer.)	Rev. G. E. Alexander..	5	1 0	410	26·90	173
,, ,, (Bredbury) ...	F. G. Smart, Esq.	5	1 0	416 ↾	27·65	176
D Cranbrook (Camden Lodge)	Mr. A. Habbitts	5	1 0	276 ↾	26·05	158
D Ashford (Bethersden)	W. H. Mold, Esq.	5	4 0	111 ↟	22 88	168
D ,, (Beavor Green)	T. Nickalls, Esq. ...	5	1 0	155 ↾	27·21	164
Horsmonden (Broad Ford House)	Col. Courthope, C.B. ...	...	...	...	28·73	...
,, (Sprivers)	,, ,, ,, ...	5	3 6	230	26·24	...
Elham Vicarage	Rev. W. Wodehouse..	5	1 3	300	28·45	160
Tunbridge Wells (Etherton Hill)	E. W. Winton, Esq.	5	1 5	276 ↟	23·88	...
D ,, ,, (Pembury) ...	T.E.W.Mellor, Esq.C.E.	8	1 8	181 ↟	21·46	163
Staplehurst (Saynden Farm) ...	J. Norris, Esq.	5	1 4	310 ↾	25·50	133
D Chiddingstone Rectory	Rev. J. T. Pearse	5	0 5	170	26·03	187
Tunbridge (Penshurst Park) ...	Mr. J. M. Sturgess ...	5	0 4	265 ↾	26·68	156
,, (Primrose Hill)	G. I. Kimmins, Esq.	5	0 10	175 ↟	24·70	154
D ,, (Beech Hurst)	W. C. Punnett, Esq.	5	1 6	102	25·72	150
,, (,, ,,) *Snowdon*	,, ,, ,, ...	5	1 6	102	25 60	150
,, (,, ,,) .....M	,, ,, ,, ...	8	4 0	105	25·43	...
D Ashford (Westwell)	Rev. H. H. D'Ombrain	5	1 0	272	25·02	168
D ,, (,, Monkery)...	F. Kingsnorth, Esq. ...	5	4 6	625	24·60	194
Edenbridge (Falconhurst)	Rt.Hon.J G.Talbot, MP	5	1 0	300	27·91	154
Wye (Bilting)	Mr. A. H. Briggs	6	1 3	158	31·19	146
Shepherdswell (Fredville)	The Meteor. Council ...	5	1 6	175	26·20	147
D Hadlow	F. W. E. Shrivell, Esq.	5	1 0	100	23·15	154

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground.	Height Above SeaLevel	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	KENT—(*con.*)						
D	Maidstone (Linton Park)	Mr. C. Pratt	5	1 0	...	23·84	152
D	,, (Lower Tovil)	Lawrence Green, Esq.	5	1 0	30 L	20·75	157
D	,, (Mount House)	C. A. Case, Esq.	5	1 0	160 T	22·29	148
D	,, Hospital	M. A. Adams, Esq.	5	0 8	200	19 73	115
D	,, (Bearsted)	Rev. A. L. Brine	5	1 1	204 R	24·02	209
	Eastry (Great Walton)	W. V. Lister, Esq.	5	1 0	25 T	22·51	145
D	East Malling (Broadwater)	C. B. Mercer, Esq.	5	1 6	80	24·46	148
D	West Malling (St. Leonards)	G. Phillips, Esq.	5	1 0	...	26·67	182
	,, ,, (Wistaria House)	F. G. Busbridge, Esq.	5	1 2	160 T	25·92	162
D	Debtling	R. Cooke, Esq.	5	1 2	330 T	24·97	188
	Aylesford (Preston Hall)	Mr. W. Jarman	5	1 6	80	22·41	...
	Sheldwich	Rev. B. S. Malden	5	1 0	250 T	28·29	147
†	Selling (Harefield)	M. G. Neame, Esq.	5	2 6	217 T	26·84	128
D	Westerham (The Fishponds)	F. C. Bayard, Esq.	5	1 0	380	24 29	131
D	Canterbury (Burgate Street)	B. Rigden, Esq.	5	9 6	58 R	22·64	132
D	,, (Irrigation Works)	A.H.Campbell,Esq.,CE	5	0 5	15 R	22·71	225
	Seven Oaks (River Hill)	J. T. Rogers, Esq.	8	4 0	535	25·34	...
†	,, (The Rectory)	Rev. T. S. Curteis	5	1 0	493	23·53	...
D	,, (St. John's Hill)	F. C. Bayard, Esq.	5	1 10	380	24·96	170
D†	,, (Riverhead Vic.)	Rev. J. M. B. Murdoch	5	0 6	300 T	23 28	127
D	,, (Chevening Gardens)	Mr. J. C. Sutton	5	1 0	360	26·55	109
D	,, (Kemsing)	T. Stonham, Esq.	5	6 0	300	24·80	171
D	Sittingbourne (Sharsted Court)	A. J. Rayfield, Esq.	5	1 0	276 T	23·99	132
	Ospringe (Lorenden)	W. C. Stunt, Esq.	5	1 4	180 ?	24·02	135
	Knockholt (Kent Waterworks)	F. C. Bayard Esq.	5	1 0	785	27·89	...
D	Keston (Bradfield)	A. Hill, Esq.	5	1 0	350 T	23·25	179
D	Farnborough (Feniton)	Rev. P. H. Percy	5	1 0	376 T	23·32	186
	Ash (Pettings House) *new g.*	C. J. G. Hulkes, Esq.	5	1 0	540 T	23·85	158
	Herne Bay (Eddington)	Miss Hawksworth	5	1 0	4 ?	21·04	...
	,, ,, (Water Works)	J. W. Thorpe, Esq.	5	0 6	120 T	18·67	...
D	Birchington (Thor)	Mr. W. H. Euden	5	1 0	40 T	20·53	151
D	Reculver (Brook)	A. Collard, Esq.	5	6 3	40 T	19·39	157
D	Hayes Common (The Warren)	Miss Akers	5	1 0	296	25·08	184
D	West Wickham (Wickham Court)	F. C. Bayard, Esq.	5	1 2	300	24·93	149
D	Orpington (Kent Waterworks)	,, ,, ,,	5	1 0	220	23·04	150
D	Farningham Hill	,, ,, ,,	5	3 0	300	23·13	177
	Chatham	The Meteor. Council	8	1 3	137	19·71	134
	Rochester (Rede Court)	,, ,, ,,	5	1 0	225	22·62	177
D	,, (Knights Place)	J. Pye, Esq.	5	2 3	320	23·96	169
	St. Peter's *old g.*	Rev. H. C. V. Snowden	5	4 0	144 R	16·04	141
D	,, ,, *new g.*	,, ,, ,,	5	0 4	140 R	20·63	142
	North Foreland	The Meteor. Council	8	1 0	115	20·53	165
D	Margate (Apsley House)	J. Stokes, Esq.	5	1 0	84 L	21·48	152
D	,, (,, ,,) *Snowdon*	,, ,,	5	1 0	84 L	21·25	152
	Strood Water Works	W. Banks, Esq., C.E.	5	3 0	112	22·11	138
D	Sheppey (Leysdown)	Rev. A. Farbrother	5	1 2	47	19·64	145
D	Frindsbury (Manor Farm)	F. Baker, Esq.	5	1 0	100	22·40	152
	Bromley Common (Elmfield)	Rev. J. P. Faunthorpe	5	0 9	235 R	23·65	155

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground.	Height above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
KENT—(*con.*)						
D Bickley (Elmhurst)	C. I. Whittington, Esq.	8	3 2	250 T	23·73	164
D ,, (The High Field)	J. Batten, Esq.	5	1 2	295	24·52	149
D Bromley (The Palace)	F. C. Bayard, Esq.	5	1 0	187	24·83	164
D ,, (Widmore Road)	Miss Scott	5	1 0	230	23·91	155
Chislehurst (Southlaund)	T. O. Hutton, Esq.	5	1 2	...	22·08	...
,, (Foxbury)	H. F. Tiarks, Esq.	8	4 6	250	26·01	198
D Wilmington (Kent Waterworks)	F. C. Bayard, Esq.	5	1 0	25	19·69	151
D Sidcup (Hatherley Road)	Dr. L. Burrell	5	1 2	350 ?	23·24	172
D Rochester (Abbot's Court, Hoo)	Warwick Stunt, Esq.	5	2 0	10	21·77	150
D Beckenham (Cedars Road)	F. C. Bayard, Esq.	5	1 0	105	24·05	174
D Sydenham (Elmfield)	O. Jepson, Esq., M.D.	5	1 0	136	23·85	164
,, (Gorrevod)	Mrs. Stephenson	5	1 0	...	24·68	..
D Forest Hill (Newfield House)	F. C. Bayard, Esq.	5	1 0	220	24·13	149
D ,, (Barr Beacon)	J. W. Restler, Esq., C.E.	5	1 0	344 ⊼	22·98	180
D Catford Hill (Avalon)	F. M. Lark, Esq.	5	0 9	...	23·83	165
D Dartford (West Hill House)	F. C. Bayard, Esq.	5	1 3	100	20·84	131
Higham (Oakleigh)	C. Lake, Esq.	8	1 2	25	19·89	115
D Rochester (Lodge Hill, Cooling)	E. W Wood, Esq.	5	5 6	247 T	19·10	121
D ,, (Cooling)	Mr. J. Filmer	5	1 0	10	20·24	125
D ,, (Hoo St. Mary)	H. Pye, Junr., Esq.	5	5 6	146 T	19·36	150
D Eltham (Cliefden)	Miss Yeatman	5	0 10	198 T	22·64	164
D ,, (High Street)	F. C. Bayard, Esq.	5	1 0	245	22·27	160
Blackheath Park (Elmsdale)	C. Lethbridge, Esq.	5	0 11	90	21 89	168
Greenwich (Royal Observatory)	W. H. Christie, Esq. C.B.	8	0 5	155 T	22·13	169
D Deptford (Kent Waterworks)	F. C. Bayard, Esq.	5	1 0	20	20·13	146
D ,, (Pumping Station)	Sir A. R. Binnie, C.E.	10	1 6	15	25·04	158
D Erith (Crossness) .....No. 3	,, ,, ,,	14	0 6	16 ⊼	19·07	140
WEST SUSSEX.						
Bognor (Lidsey Lodge)	H. Neale, Esq.	8	1 2	...	26·41	139
Littlehampton (Surrey House)	G. Neame, Esq.	5	1 8	20 T	25·23	...
Worthing	The Royal Meteor. Soc.	5	1 0	33	24·26	...
D ,, (Ellesmere)	C Kelly, Esq., M.D.	5	1 0	26 ⊼	26·07	172
D West Thorney	H. Padwick, Esq.	5	1 0	10	26·72	154
D Arundel (Yapton)	W. A. Hounsom, Esq.	5	1 0	24 ⊼	25·71	154
,, (,, Drove Farm)	,, ,, ,,	5	1 0	14 T	27·01	148
Angmering	Rev. J. B. Orme	5	1 3	44	25·29	...
D Chichester (Sewage Works)	Baldwin Latham Esq C.E	5	1 0	10 ⊼	28·00	151
,, (Westgate Meadow)	Dr. Tyacke	8	0 6	40	28·29	138
,, (Little London)	C. F. Porter, Esq.	5	1 6	56 ⊼	28·28	138
D ,, (Oaklands)	G. A. Tyacke, Esq.	8	0 9	80 ⊼	28·01	177
D Arundel (Clapham Rectory)	Rev. A. H. S. Barwell	5	1 0	150 T	29·08	192
,, (Patching)	J. Drewitt, Esq.	5	1 0	180	29·12	166
D ,, (,,)	Mrs. Joad	5	0 10	130 T	28·15	192
D ,, (The Parade)	A. Holmes, Esq.	8	1 6	30	32·45	133
West Bourne [Emsworth]	Rev. L. B. Birkett	5	0 8	30	31·13	...
West Stoke Rectory	Rev. W. F. Shaw	5	1 0	176	28·30	123
D† Steyning	Col. Ingram	5	1 0	80 T	32·34	131

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WEST SUSSEX—(*con.*)						
Steyning (Crescent Road)	Mr. H. J. Hide	5	1 0	80	30·41	127
Chichester (Eartham House)	Sir P. Milbanke, Bt.	3	4 6	240 T	24·73	...
D ,, (Forest Side Vic.)	Mrs. J. C. Parson	5	1 0	341	32·58	167
D ,, (Watergate)	late R. Christy, Esq.	5	3 6	240 T	32·94	176
,, (West Dean Park)	Mr. W. H. Smith	...	1 6	190	32·13	142
† ,, (Chilgrove)	J. W. Woods, Esq.	5	0 6	284 T	37·48	...
D Compton [Petersfield]	Rev. H. M. Langdale	5	1 0	255 ⅄	35·79	187
Petworth Park	Mr. E. W. Pull	5	1 0	182	31·64	150
Cowfold (The Laurels)	Mr. S. Ford	5	1 6	273	27·90	...
D Midhurst (St. Ann's)	Genl. Paxton	8	1 8	120 ⅄	30·15	175
D ,, (Borden Wood)	T. J. Hare, Esq.	5	1 2	280 T	32·05	180
,, (Lynch Farm)	G. Eames, Esq.	5	0 6	160 T	33·91	122
,, (Hollycombe)	J. C. Hawkshaw, Esq.	8	6 6	...	32·33	119
Blackdown House [Haslemere]	F. Philipson Stow, Esq.	5	1 10	488 T	28·66	...
Horsham (Selehurst)	W E. Hubbard, Esq.	5	1 6	305	28·02	...
D ,, (Bourne Hill)	F. W. Pigott, Esq.	5	1 0	250 T	27·59	182
,, (Manor House)	H. Padwick, Esq.	8	0 10	140 T	32·95	159
D ,, (Wimblehurst)	Miss F. E. Allcard	5	1 0	200 T	27·91	188
EAST SUSSEX.						
†Beachy Head	Miss Brodie Hall	5	1 0	515 T	23·27	...
Eastbourne (Wilmington Square)	R. Sheward, Esq.	8	0 6	39	29·73	170
D† ,, (Osborne House)	Miss Hood	5	1 0	12 T	28·88	178
D ,, (Glenthorne)	Miss Woodd	8	1 6	86 ⅄	30·54	168
D† ,, (Trevella)	S. Whitley, Esq.	5	0 6	64 ⅄	30·89	186
D† ,, (Cemetery)	Miss Brodie Hall	5	4 0	160 ⅄	27·59	125
D†Jevington (Church Farm)	F. Stileman, Esq., C.E.	8	1 0	274 ⅄	28·53	173
D†Litlington (Plough & Harrow Inn)	,, ,, ,,	8	1 0	19 ⅄	29·69	166
D†Willingdon (Hill Cottage)	,, ,, ,,	8	1 0	599 ⅄	29·90	196
†Brighton (Kemp Town)	Mr. Wyatt	5	1 0	82 T	26·17	144
D† ,, (Old Steine)	A. Newsholme, Esq., MD	5	1 0	32 T	29·12	172
,, (Hove)	C. L. Prince, Esq.	...	...	...	27·81	157
D ,, (W. W. Goldstone Bottm)	J. Johnston, Esq., C.E.	8	0 7	140 ⅄	26·76	152
D ,, (,, Lewes Road)	,, ,, ,,	8	3 6	88 ⅄	28·74	153
D ,, (,, Patcham)	,, ,, ,,	5	1 6	207 ⅄	29·95	165
D ,, (,, Race Hill)	,, ,, ,,	8	1 0	466 ⅄	29·03	151
Bexhill (The Grange)	Miss A. Scrivens	8	4 6	140 T	24·65	126
St. Leonards (Gensing Gardens)	The Meteor. Council	5	1 0	166 T	28·06	163
D ,, ,, (The Grove)	W. B. Young, Esq.	5	1 1	110 T	28·08	154
Selmeston Vicarage	C. L. Prince, Esq.	...	...	...	28·54	197
D†Iford (Swanborough)	R. H. Verrall, Esq.	5	3 10	115 T	32·21	172
D Hailsham	Rev. F. Clyde Harvey	5	1 0	105	29·02	131
D†Falmer	R. R. Verrall, Esq.	5	3 0	312 ⅄	33·48	168
D†Lewes (Bedford Lodge)	Mrs. Kemp	5	1 0	85 T	25·39	185
D† ,, (Saxonbury)	A. Hillman, Esq.	5	1 0	75 T	28·89	172
D† ,, (Southmalling)	Miss M. H. Rickman	5	1 0	40 ⅄	26·07	168
D† ,, (,,) *mound g.*	,, ,, ,,	5	1 5	63 T	20·36	167
D Hastings (Newgate Res.)	P. H. Palmer, Esq., CE	8	0 10	240	25·35	154

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
EAST SUSSEX—(*con.*)						
†Hastings (High Beech Hollington)	Col. Lewis	5	1 0	320 T	27·84	162
D ,, (Guestling Rectory)	Rev. E. N. Bloomfield.	5	1 5	125 ⅄	28 75	174
Clayton Rectory	Rev. T. H. R. Shand	5	1 1	201	31·12	...
D Hurstpierpoint (Danny Park)	Mr. J. Bunney	8	1 3	180	31·40	131
D Winchelsea (The Friars)	Miss Stileman	5	1 2	115 T	22·08	149
D Battle (Whatlington)	Miss H. Gripper	5	1 3	90 T	27·08	156
Horsted Place	C. L. Prince. Esq.	...	...	149	27·91	152
D†Isfield Place *old g.*	Major H. King	5	1 0	41 ⅄	25·11	178
,, ,, M	,, ,,	5	1 0	41 ⅄	24·17	...
Playden (East Guldeford Lane).	G. Pile, Esq.	5	1 0	...	27·24	...
Uckfield House	C. L. Prince, Esq.	8	0 10	200 B	27·38	175
D Haywards Heath	C.E. Saunders, Esq. MD	5	1 1	281	26·61	131
D Buxted Park	Mr. H. C. Prinsep	8	1 0	94	28·81	164
,, (Strawberry Hall)	C. Rintoul, Esq.	5	1 0	220	27·49	165
D†Maresfield (Forest Lodge)	Capt. W. Noble	8	1 2	247 ⅄	29·92	190
Cuckfield (Workhouse)	The Meteor. Council	...	1 0	389	25·24	148
Lindfield (Wood Knoll)	Mrs. Weedon	5	1 0	188 ⅄	29·76	180
D Nutley Vicarage	Rev. H. J. Peckham	5	1 0	386 T	29·96	197
D†Crowborough (The Observatory).	C. L. Prince, Esq.	8	0 8	770 ⅄	30·92	166
Haywards Heath (Brook House)	H. R. G. Clarke, Esq.	5	1 0	240	28·20	142
D Balcombe Place	Mr. Warren	8	1 3	289 T	29·40	178
D ,, (Highley Manor)	H. M. Baker, Esq.	8	1 6	422 ⅄	28·73	122
Ticehurst	Mr. Jordan	5	4 9	423 ⅄	28·54	205
D Wadhurst (Lower Cousley Wood)	F. Wilkin, Esq.	5	1 0	416 ⅄	28·49	185
Frant (Eridge Castle)	Mr. A. Wilson	5	2 0	400	33·35	130
Forest Row (Harbury)	N. W. Grieve, Esq.	8	4 0	280 T	27·12	126
D Worth (South Hill)	P. E. Ravenshaw, Esq.	5	1 6	558 T	31·32	187
D East Grinstead Station	Mr. G. Mitchell	8	2 2	410	27·06	161
,, ,, (Halsford Park).	W. V.K. Stenning, Esq.	5	1 6	365 ⅄	27·18	151
HAMPSHIRE. ISLE OF WIGHT.						
D Ventnor	J. S. Ineson, Esq.	10	2 0	70	29·56	174
,, (Consumption Hospital)	The Royal Meteor. Soc.	5	1 0	75	28·94	160
D*Bonchurch (The Lilies)	Mr. W. C. Moseley	5	1 0	300 T	29·90	173
D Sandown (Belgrave House)	W. E. Green, Esq.	5	1 0	105	32·62	163
Brading Vicarage	Rev. E. Summers	5	1 6	50 ?	28·59	...
D Totland Bay (Wilmington)	J. Dover, Esq.	8	1 0	85 T	29·80	166
D Carisbrooke (Rainsgrove)	Baldwin Latham Esq CE	5	1 0	180	35·20	168
D Newport (Castle Hold)	A. Le Mesurier, Esq.	5	1 0	45	29·86	172
Yarmouth Schools	Mr. J. E. Furnage	5	1 0	8	27·87	133
D Ryde (Thornbrough)	Col. Clarke	5	1 0	143 T	32·14	182
D ,, (New Lodge)	Capt. W. A. Dobie	5	1 1	147	31·72	176
,,	Mr. T. C. Flower	12	9 0	35	31·61	130
,, (Town Hall)	F. Newman, Esq.	8	1 0	83 ⅄	24·60	176
D Wootton (Fernhill)	C. G. Brodie, Esq.	8	0 6	118 T	32 24	140
D†Osborne (Newbarn Cottage)	R. Scott, Esq.	8	0 8	172 ⅄	29·92	189

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
	HAMPSHIRE—(*con.*)							
	Hurst Castle	The Meteor. Council	8	0	11	9	28·17	165
	Bournemouth(Clarendon Court)	G. Galpin, Esq.	5	1	0	110 T	32·26	...
	,, (WellingtonHouse)	Messrs. Primavesi Bros	5	1	0	100 T	33·40	173
D	Milford-on-Sea	R. Bruce, Esq.	5	1	0	40	24·90	123
D	Christchurch (Mudeford)	F. H. D. Eyre, Esq.	5	0	3	15 L	29·46	162
D	,, (Winkton Lodge)	Miss J. Lassell	5	0	9	34 ⅄	31·44	169
D	,, (Heron Court)	Earl of Malmesbury	8	0	6	25	34·30	171
D	Portsmouth (Fort Cumberland)	P. Murch, Esq., C.E.	8	0	9	16 ⅄	24·14	140
D	,, (Milton)	Dr. Fraser	5	1	0	18 ⅄	28·33	163
D	North Hayling	F. Padwick, Esq.	5	1	0	10	25·90	147
D	Porchester (Noel Cottage)	Miss Montgomery Frost	5	1	0	...	29·13	167
D	Havant (Farlington)	H. R. Smith, Esq., C.E.	5	1	0	77 T	27·92	172
	,, (,,) M	,, ,, ,,	5	1	0	77 T	27·78	...
D	,,	,, ,, ,,	5	1	0	25 T	30·11	158
	,, M	,, ,, ,,	5	1	0	25 T	30·00	...
D	Emsworth (Redlands)	F. Jacomb Hood, Esq.	5	1	0	90 T	29·75	169
	Southampton (Cadland)	J. Laurie, Esq.	8	4	6	52 T	33·61	169
D	,, (Netley)	Prof. J. Lane Notter	8	0	5	37 ⅄	36·15	166
D	,, (,, Lake Ho.)	Col. Pennington	8	1	0	54 ⅄	32·14	201
	,, (Ordnance Surv. Off.)	Col. Farquharson, C.B.	5	1	0	79 ⅄	32·55	170
D	,, (Totton)	Mr. W. F. Harold	5	5	0	85	34·99	174
	,, (Anglesea Rd.,Shirley)	A. Spooner, Esq.	5	1	1	83	30·76	...
D	Wickham (The Croft)	RevStanhope Rashleigh	5	0	11	80 ?	30·31	171
†	Botley (Fairthorne)	R. A. Burrell, Esq.	8	1	0	70	31·48	178
D	,, (Hall Court)	Admi. Murray-Aynsley	8	1	6	105 T	31·73	172
D†	,, (Botley Hill)	A. Jenkyns, Esq.	5	1	6	36 T	30·66	172
D†	,, (Beachcroft, Curdridge)	Miss Pasley	8	2	0	100	30·04	190
D	Horndean (Blendworth Lodge)	Mrs. Long	5	2	0	217	36·23	161
D	,, (St. Catherines)	Miss Barnes	8	1	7	417 T	39·01	188
D	Lyndhurst (Brook)	G. Waller, Esq.	5	1	0	156 ⅄	35·84	121
D†	Southampton (Red Lodge)	R. C. Hankinson, Esq.	5	0	6	206	29·62	204
D	Fordingbridge (Oaklands)	Mrs. Westlake	8	1	0	135 T	35·59	137
D	Hambledon (Rosecroft)	Mr. L. Dawes	5	2	6	200	34·68	184
	Bishops Waltham (Swanmore House)	W.H.Myers, Esq., M.P.	8	1	0	390 T	31·53	147
D	,, ,, (Hill Place)	Major W. A. Daubeny.	8	0	9	260 T	33·68	182
	,, ,, (Northbrook Ho.)	H. W. Trinder, Esq.	5	1	0	140	32·47	163
	Droxford (Fir Hill)	Rev. S. King	5	3	6	212 T	31·73	184
	Fordingbridge (Wood Green)	H. Hinxman, Esq.	5	1	2	140 ⅄	31·54	...
	East Meon (Westbury House)	H. Le. Roy Lewis, Esq.	5	5	8	296 ⅄	36·68	170
D	Ampfield Vicarage	Rev. Vere Awdry	5	3	0	230 T	29·49	167
†	Otterbourne Hill Reservoir ... M	W. Matthews, Esq.,CE	5	18	0	273 ⅄	18·56	...
D†	,, (W.W., Shawford)	,, ,, ,,	5	1	0	113 ⅄	29·01	175
†	,, (,, ,,) M	,, ,, ,,	5	1	0	113 ⅄	29·35	...
D	Petersfield (Fairley)	AWLeachman,Esq.MD	5	0	7	202 T	33·74	176
D	,, (Steep Vicarage)	Rev. E. L. Puxley..	5	0	7	170	26·24	181
D	Kilmeston Manor	F. W. C. Read, Esq.	5	4	0	...	30·85	165
D	West Dean	Rev. E. Wells	5	1	0	137 B	29·41	161
	Liss (Liss Place)	F. Coryton, Esq.	7	0	7	250 ⅄	34·19	...

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
HAMPSHIRE—(*con.*)						
D Liss (Lingwood)	R. Barnes, Esq., M.D.	5	0 9	510	34·16	160
D†Alresford (Hinton Ampner)	Rev. J. Heberden	8	4 4	340 ⊼	31·15	176
D ,, (Ovington)	Rev. H. F. La M. Stowell	5	1 0	221 T	31·40	160
D ,, (Itchen Stoke Rectory)	Rev. C. H. Conybeare	5	1 0	214 T	30·04	178
D Greatham (King's Holt)	Mrs. Parr	5	1 7	279 T	31·64	156
D†Winchester (Harestock)	Col. Knight	5	1 0	302 ⊼	32·98	181
Liphook (Fowley)	E. A. Lee, Esq.	5	0 10	296 T	33·94	190
,, (White Hill Chase)	Col. R. H. Maude	5	1 0	300 ⊼	32·38	158
D Hartley Maudit Rectory	Rev. A. C. Hervey	5	1 1	540 T	27·62	120
Headley (Eveley)	Mr. T. Carter	5	1 3	295 T	33·25	154
D Swarraton Rectory	Rev. W. L. W. Eyre	5	1 0	310 ⊼	33·37	190
D Old Lodge [Salisbury]	E. Lamb, Esq.	8	1 1	480	32·49	192
D†Alton (Ashdell)	F. Crowley, Esq.	8	3 6	433 ⊼	33·36	171
,, (Eagles Nest)	,, ,, ,,	5	52 4	505	21·27	...
,, Grammar School	G. J. Poole, Esq.	5	1 2	390	31·90	168
,, (Hill House)	C. H. Dyer, Esq.	5	1 0	361	34·00	185
,, (Shalden Manor)	J. G. Wood, Esq.	8	3 0	594	32·15	...
D Whitchurch (Long Parish)	C. Durnford, Esq.	...	...	...	27·74	161
Andover (The Knoll)	G. H. Westbury, Esq.	5	0 10	196 T	31·46	157
D Tedworth House [Ludgershall]	Mr. G. A. Inglefield	5	1 8	357 T	34·52	171
D Crondall (Warren Corner)	F. Wilkin, Esq.	5	1 0	575 T	26·09	150
D ,, (,, ,,)	,, ,, ,,	5	1 0	575 T	26·31	149
D Basingstoke (Chapel Hill)	G. Stephens, Esq.	5	1 0	328 T	26·25	158
Rotherwick (Tylney Hall)	C. E. Harris, Esq.	5	0 10	330	26·54	162
D†Basingstoke (Sherborne St. John)	Rev. D. W. Chute	5	1 2	267 T	28·27	171
D Winchfield (Bylands)	Lady Mary Scott	8	1 4	222	23·49	158
D ,, (Elvetham Park)	Mr. G. B. Mitchison	8	1 0	217 T	26·78	209
Farnborough (The Grange)	Major Holt	5	1 0	232 T	30·04	157
D ,, (The School)	Rev. G. C. Carter	5	1 0	257 T	26·38	168
Hartley Wintney	Mr. W. G. Machin	5	1 2	222 T	24·60	160
,, Grange	F. Walkinshaw, Esq.	5	1 0	221 ⊼	25·13	161
Kingsclere (Tower Hill House)	R. Maples, Esq., M.D.	...	...	..	30·76	175
†Strathfield Turgiss	Mrs. Griffith	5	2 6	200 ⊼	23·30	...
Strathfieldsaye Gardens	Mr. J. W. McHattie	5	2 0	164	24·11	145
Heckfield (Park Corner)	J. Martineau, Esq.	5	1 2	257	22·92	142
BERKS.						
D Sandhurst Lodge	Sir W. J. Farrer	8	2 9	263	24·20	165
D Wellington College	S. A. Saunder, Esq.	5	1 0	283 ⊼	23·87	155
D Aldermaston Wharf	J. T. Strange, Esq.	5	1 0	181 ⊼	25·82	177
D Sunninghill (Lynwood)	G. Rodie Thompson, Esq.	5	1 0	266 ⊼	25·11	163
D Ascot (Manor Farm)	C. A. Ferard, Esq.	5	0 10	240 ⊼	23·67	175
D ,, (,, ,,)	,, ,, ,,	5	1 0	240 ⊼	23·94	171
Newbury (Donnington Sq.)	W. J. Cowper, Esq.	5	3 6	282 ⊼	28·85	168
D ,, (Benham Park)	Mrs. Myers	8	1 3	...	28·02	178
D Arborfield Rectory	Rev. J. Jones	5	1 2	158 ⊼	22·33	160
Shinfield (Clares Green)	A. Palmer, Esq.	5	4 6	160 T	21·15	156

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge			Depth of Rain.	Days on which ·01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1897	
			ft. in.	feet.	inches.	
BERKS—(*con.*)						
D Hungerford (Kintbury)	Sur.-Gen. Woolfryes, CB	5	1 0	297 T	29·12	189
,, (,, ForburyGrove)	Mr. T. Head	...	...	...	29·97	160
,, (Denford Park)	Gen. Cherry-Garrard	5	1 2	430 T	29·03	156
D Beenham House	H. Waring, Esq.	8	2 2	320	24·04	123
D Bracknell (Warfield)	Rev. B. C. Littlewood	5	0 4	199 T	23·37	186
D Old Windsor (Beaumont College)	Rev. J. Scoles	5	1 1	96	24·97	138
D Windsor (Royal Gardens)	Mr. T. Edwards	5	1 0	...	22·91	163
Reading (Maiden Erlegh)	Mr. T. Turton	5	1 0	200	23·50	174
,, (Englefield)	Mr. J. Coombes	5	1 1	...	25·27	148
D ,, (Calcot Place)	General Swettenham	5	1 4	176 T	24·13	176
D ,, (Ellerslie)	Rev. A Cheales	5	1 0	195 ⊼	22·90	142
D ,, (Forbury Gardens)	J. Bowen, Esq., C.E.	5	1 5	145 ⊼	22·54	162
,, (East Thorpe)	A. Palmer, Esq.	5	3 0	157 T	23·78	160
,, (Earley)	M. J. Sutton, Esq.	8	1 6	...	22·18	...
D Twyford (Haines Hill)	Mrs. Wedderburn	5	0 7	155	22·27	174
D Newbury (Welford Park) *old g.*	Mr. C. Ross	5	1 0	335 ⊼	30·06	193
D ,, (,, ,,) *new g.*	,, ,,	5	1 0	341 T	30·60	193
D ,, (Weston)	R. Osmond, Esq.	5	1 4	338 T	27·18	172
D Yattendon Court	Mr. R. Maker	5	1 0	450 T	27·15	163
D Maidenhead (Lowood)	Gen. Davies	8	1 0	167 T	26·65	167
D ,, (Castle Hill House)	F. C. Young, Esq.	5	1 0	163	27·85	195
D ,, (Pinkney's Green)	G. Norsworthy, Esq.	5	1 6	240	27·15	177
D ,, (Cookham Vic.)	Rev. R. W. Rogers	5	1 3	90 T	24·44	160
D Temple House [Marlow]	Mr. G. Groves	5	1 0	106	25·64	175
D Wantage (Letcombe Regis)	S. W. Silver, Esq.	5	0 9	...	23·33	121
,,	W. Hanson, Esq.	5	1 0	304	26·57	157
Wallingford Castle	J. Kirby Hedges, Esq.	5	1 0	175 ⊼	22·04	168
Little Wittenham Rectory	Rev. Percy Burd	5	1 0	187 T	22·75	165
D ,, ,,	T. J. Latham, Esq.	5	2 0	187	22·56	137
D Long Wittenham (Manor Ho.)	Capt. Clutterbuck, R.N.	12	1 0	165 T	24·49	146
,, ,, (Lovegrove's Cott.)	Rev. F. C. Clutterbuck	5	1 0	165	24·61	145
Faringdon (The Elms)	W. Dundas, Esq.	5	1 0	340 T	28·01	171
Abingdon (Caldecott House)	Maj.-Genl. T. M. Bailie	5	1 4	...	25·22	121
D ,, Union	Mr. J. Fray	5	2 0	196	22·93	175
,, (Sewage Works)	G. Winship, Esq., C.E.	5	0 6	169	19·88	104

DIVISION III.—SOUTH MIDLAND COUNTIES.

HERTS.							
D Southgate (The Lawns)	G. A. Church, Esq.	5	0 6	240 T	28·63	190
D† Rickmansworth (Moor Park)	Rt. Hon. Lord Ebury	5	2 0	340	28·48	173
D Elstree (Aldenham House)	Mr. E. Beckett	10	4 9	305	23·26	133
D Watford (Frogmore)	A. P. Blathwayt, Esq.	5	1 0	182 T	25·63	166
,, (Colne Valley W.W.)	J. Hopkinson, Esq.	5	1 0	220	25·54	165
D ,, (Oaklands)	E. Harrison, Esq.	5	5 6	273	26·87	167
D ,, (London Orphan Asylum)	H. Crickmore, Esq.	5	1 0	230	26·46	166

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
HERTS—(*con.*)						
D Watford (St. Alban's Road) ...	H. Ruddle, Esq.....	5	1 0	...	25·47	110
Barnet (Gas Works)	J. Hopkinson, Esq. ...	8	0 9	212	26·57	...
Chipperfield (Little Callipers) ...	A. W. Rivington, Esq.	5	7 4	407 T	26·32	110
D Cheshunt Old Nurseries	Messrs. Paul & Son ...	5	1 0	92 T	20·67	141
Kings Langley (Laurel Bank)...	I. Butler, Esq.	5	1 0	283 ⅄	27·62	...
D Broxbourne (Stafford House) ..	G. J. Newbery, Esq....	5	1 0	118 T	23·11	164
D Hemel Hempstead (Nash Mills)..	Messrs. J Dickinson & Co.	12	3 9	237 T	23·44	148
D ,, ,, (Apsley Mills)	,, ,, ,, ...	24	0 9	260	27·89	160
D St. Albans (The Grange)	J. Hopkinson, Esq. ...	5	1 0	380 ⅄	25·44	176
,, (Bone Hill)	,, ,, ,, ...	5	1 0	336 ⅄	24·25	166
† ,, (Gorhambury).....	Mr. Newberry.....	5	1 0	425 T	25·67	166
D Great Berkhampstead (Rosebank)	E. Mawley, Esq.	8	1 0	401 ⅄	26·46	169
,, ,, (,,)M	,, ,, ...	8	1 0	401 ⅄	26·36	...
D ,, ,, (Fairhill)...	W. B. Hopkins. Esq ..	5	1 0	548 ⅄	25·26	189
D ,, ,, (Northchurch)	F. L Sutton, Esq.	5	1 0	400	26·10	145
D ,, ,, (Gt. Gaddesden)	Rev. W. Tyrwhitt Drake	8	1 0	426 ⅄	26·19	164
Gilston Park	Mr. W. Cooper	8	0 6	175 T	23·46	104
Hertford (Bayfordbury)	W. C. Baker, Esq.....	8	1 2	250	22·49	167
D ,, (Marden Hill, Tewin)..	R. Hoare, Esq..	5	1 0	257 T	22·59	151
Tring (Pendley Manor)	J. G. Williams, Esq....	5	2 0	500 ?	27·85	203
D ,, (Offside Cottage, Cowroast)	R. Leah, Esq.....	5	1 4	420	27·10	187
,, (Cowroast)	G. Thomas Esq.....	5	3 8	394 ⅄	26·82	158
Harpenden (Rothamstead)	Sirs J. Lawes & J. Gilbert	5	0 9	420 T	25·41	169
,, (,,)	,, ,, ,, ...	8	0 9	420 T	24·97	154
D ,, (,,)	,, ,, ,, ..	72X87	0 9	420 T	27·17	181
D Ware (Red House).....	J. Francis, Esq., C.E..	5	0 9	112 T	22·47	148
D ,, (Fanham's Hall)	Miss Joyce Croft	8	1 0	253 T	23·72	165
Sawbridgeworth (Cowicks)	J. Hopkinson Esq. ...	6	1 0	240	27·24	159
D Welwyn (Bridge House)	B. W. Thomas, Esq., MD	5	6 6	...	24·10	161
D ,, (Danesbury)	A. M. Blake, Esq.	5	2 0	400	24·42	152
D ,, (Datchworth Rectory)..	Rev. J. Wardale	5	1 0	386 T	21·69	147
D Much Hadham	T. W. Mott, Esq.	5	1 0	222 B	25·22	158
D Kensworth [Dunstable]	Miss Jones	5	1 0	630 B	26·42	156
D Bennington House.....	Rev. Dr. Parker.....	5	1 0	408 ⅄	22·73	166
D ,, ...	Miss C. Nihill.....	5	1 0	408	23·81	173
D Buntingford (Hamels Park).....	Mr. E. Wallis	5	1 0	400 T	23·40	149
D† Hitchin (Wratten).....	W. Lucas, Esq.	5	2 1	238 ⅄	22 80	168
,, (The Maples)	W. Hill, Esq.....	8	1 1	220 T	22·81	156
D ,, (Bancroft)	F. Ransom, Esq.	5	0 9	212 T	23·51	169
,, (High Down)	J. Pollard, Esq.	5	1 1	422 ⅄	22·95	179
D Weston Park	M. R. Pryor, Esq	5	0 8	470 T	27·73	166
D Buntingford (Throcking Rectory)	Rev. C. W. Harvey ...	5	1 0	484 T	23·41	177
D Baldock (Hitchin Street)	Dr. Langston Day.....	5	1 4	214 ⅄	22·87	158
D Royston (Therfield Rectory).....	Rev. J. G. Hale	5	4 3	510 ⅄	25 49	166
D† ,, (London Road)	H. Wortham, Esq.....	8	0 6	269 ⅄	22·58	167
,, (Melbourne Street).....	J. E. J. Phillips, Esq..	8	0 11	201 T	22·81	152

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground.	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
BUCKINGHAMSHIRE.						
Eton (Tangier Island)	C. Sainty, Esq.	5	1 0	67 ⊼	22·46	137
D Slough (Langley)	R. H. Major, Esq.	8	0 10	85 T	23·65	145
,, (Upton)	R. Bentley, Esq.	8	3 0	80 ⊼	22·00	...
D ,, (,,)	,, ,, ,,	5	2 0	78 ⊼	24·53	159
D ,, (Upton Park)	H. M. Baker, Esq.	5	1 5	80 ⊼	23·90	160
,, (,, ,,)	F. R. Warren, Esq.	5	1 6	89	24·18	...
Burnham (Fair View)	G. J. Williams, Esq.	5	3 0	180	25·23	104
D Taplow Court	W. H. Grenfell, Esq.	8	1 0	217 T	23·47	125
Greenlands [Henley-on-Thames]	Hon. W. F. Smith, M.P.	8	1 3	116	24·61	116
D Hedsor	Rt. Hon. Lord Boston.	8	1 0	170 T	26·47	143
D Marlow	T. H. Wright, Esq.	8	2 0	105	26·81	135
High Wycombe	H. S. Wheeler, Esq.	8	0 9	253 ⊼	25·58	...
D Chalfont St. Giles (The Stone)	Col. Phipps	5	1 0	270 T	27·65	170
D Amersham (The Plantation)	G. Weller, Esq.	8	1 0	464 ⊼	29·05	162
D Princes Risboro' (Little Kimble)	T. W. Morris, Esq.	5	1 3	322	29·04	140
D Wendover (Halton Gardens)	Mr. Sanders	5	1 10	400	27·56	147
Bulbourne [Tring]	G. Thomas, Esq.	5	2 3	401 T	25·25	175
Aylesbury (New Road)	J. Copcutt, Esq.	12	1 0	280 T	20 70?	...
Waddesdon Manor	Mr. J. Jaques	6	1 6	364 T	28·17	168
Mentmore	J. Smith, Esq.	5	1 1	...	23·45	...
D† Winslow (Addington Manor)	Rt. Hon. Lord Addington	8	1 0	309 ⊼	28·68	170
,, (,, ,,) M	,, ,, ,,	5	1 0	309 ⊼	28·73	...
D† Buckingham (Adstock)	J. E. S. Weston, Esq.	5	0 9	350 T	27·86	161
D Stony Stratford (Thornton)	Mr. W. Sturdy	5	1 3	...	27·35	134
Woburn Sands (Sandymount)	Miss Stuart	5	1 1	350	24·56	161
D Newport Pagnell	F. Littleboy, Esq.	5	2 0	196 T	26·06	127
Olney (Filgrave Rectory)	Rev. J. Tarver	8	0 8	285	27·64	149
OXFORD.						
D Whitchurch Rectory	Rev. Canon Slatter	10	1 0	150 ⊼	23·23	145
D Caversham (Cane End House)	D. Vanderstegen Esq.	5	0 4	400 ?	24·66	157
,, (Kidmore Grange)	M. J. Sutton, Esq.	5	1 0	...	24·50	..
Henley-on-Thames (Greys)	Rev. N. Pinder	5	2 6	370 T	25·79	...
D ,, ,, ,, (Northfield Ho.)	J. W. Guy, Esq.	5	1 0	120	23·77	161
D ,, ,, ,, (Assenton)	Mr. J. Ratty	5	1 0	281	27·02	152
D Dorchester	Col. Blunt	5	0 6	169 T	23·72	170
D ,, (Bishops Court)	T. Latham, Esq.	5	2 0	169	23·35	160
D Abingdon (Culham)	Rev. F. C. Clutterbuck	5	1 0	200 ⊼	24·24	168
D Watlington (Pyrton Manor)	Cecil Hamersley, Esq.	5	1 0	321 T	26·75	174
D Nuneham Park Gardens	Mr. Munday	8	3 0	280 T	24·83	159
Wheatfield Rectory	Rev. C. V. Spencer	5	1 3	260	24·97	...
D Toot Baldon (Potlands)	D. Clinkard, Esq.	5	1 0	288	25·68	155
Waterstock	W. H. Ashhurst, Esq.	8	3 0	206 T	24·61	175
Thame (Tythrop House)	Miss Wykeham	8	1 2	255 T	22·29	113
D† Oxford (Mag. Coll. Laboratory)	E. Chapman, Esq.	5	1 0	186 ⊼	24·51	157
,, (,, ,, ,,)	,, ,, ,,	5	33 11	223 ⊼	22·05	..
,, (Radcliffe Observatory)	The Radcliffe Observer	8	1 8	210 ⊼	26·37	148
D ,, (,, ,,)	,, ,, ,,	11	2 4	210 ⊼	27·19	153

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	OXFORD—(*con.*)						
	Oxford (Radcliffe Observatory)..	The Radcliffe Observer	10	22 0	230 ⅄	26·71	148
	,, (,, ,,)..	,, ,, ,,	10	112 0	320 ⅄	19·23	132
D	,, (St. Giles')	Miss Tawney	8	1 3	211 ⅄	27·96	162
D	,, (Norham Road).....	Rev. C. B. Mount	10	1 2	220 ?	26·33	154
	,, (Headington Hill)	Miss Davenport	5	0 10	354	26·64	...
D	,, (Elsfield)	H. Parsons, Esq.	5	1 0	330 T	25·08	180
	Stanton St. John's...	Miss Thomson.....	8	1 0	340	24·59	166
	,, ,, ,, (Woodperry)..	J. Thomson, Esq.	6	1 0	399 T	26·65	172
	Witney (Lynton House)	J. Opie, Esq.	5	1 0	300 T	23·83	...
D	Charlbury (Highfield)	E. Sturge, Esq.	5	1 6	442 ⅄	28·05	190
	Chipping Norton (Kingham).....	E. Lockwood, Esq. ...	5	4 0	442	30·13	...
	,, ,, (Churchill).....	G. Edmonds, Esq.....	5	1 0	510 T	28·20	192
D	Bicester (Middleton Park)	Rt. Hon. Earl of Jersey	5	2 6	336 T	27·69	160
	Steeple Aston (Hill House)	B. S. Ogle, Esq.....	5	0 6	400 T	27·92	175
D	,, ,, (The Grange).....	Adl. Bradshaw, C.B....	8	1 0	400 T	26·41	183
D	Swerford.....	Mr. W. Hall	5	1 0	570 T	29·58	185
D	Barford St. Michael (Irondown).	S. N. Baker, Esq.	5	1 2	540 T	28·01	181
D	Banbury (Adderbury)	G. H. Norris, Esq.....	5	1 1	323 ⅄	26·20	187
D	,, (Bloxham Grove)	W. H. Warriner, Esq.	8	3 10	387 ⅄	26·78	165
D	,, (Sibford Ferris)	J. Lamb, Esq.	5	1 0	590 ⅄	26·37	159
D	,, (Bodicote)	J. F. Starkey, Esq. ...	8	1 3	388 ⅄	27·79	162
	,, (Ark House School) ...	A. J. Beale, Esq.	5	1 0	310	26·82	183
	NORTHAMPTON.						
	Brackley (East Hill).....	Sir G. Bannerman, Bt.	5	1 0	425 T	27·02	171
D	Grimsbury [Banbury]	W. E. Wood, Esq.... ..	5	1 3	320 T	25·03	151
	,, [,,]	A. B. Field, Esq.	8	2 0	320	24·10	...
	Thorpe Mandeville [Banbury]...	Mr. S. Baines	5	1 0	530	30·41	146
D	Towcester (Whittlebury)	W. S. Miller, Esq.....	5	1 6	350	29·04	153
D	,, ...	P. Phipps, Esq.	5	1 0	290	28·23	140
	,, (Easton Neston)	Mr. E. Slarke.....	8	1 0	340 T	26·63	166
	Byfield (Woodford Halse)	Rev. F. A. Smith	5	1 6	488 T	29·08	139
D	Blisworth (Grafton House)	A. Westley, Esq	5	5 0	320	26·09	171
D	,, ...	T. W. Millner, Esq. ...	5	1 6	300 ⅄	24·16	160
D	Lichborough Hall	E. Grant, Esq.	5	1 1	500	33·10	183
D	Daventry (Fawsley)	Lady Knightley	5	1 0	477 T	26·82	153
D	Castle Ashby	R. G. Scriven, Esq. ...	5	1 0	263 ⅄	26·55	188
	Little Houghton	C. A. Markham, Esq...	...	...	...	25·12	142
	Northampton (Berrywood)	R. Greene, Esq.	8	1 4	399 ⅄	25·13	139
	,, (Pytchley Street)..	Mr. E. Ball	5	1 6	270	25·56	166
	,, (Kingsthorpe).....	S. Law, Esq.	5	1 0	280	26·51	162
D	Althorp House	Miss Chowler	8	3 10	310 ⅄	22·38	139
	Great Brington	C. A. Markham, Esq....	...	...	..	23·12	145
D	Pitsford (Sedgebrook)	,, ,, ,, ...	5	1 0	311 ⅄	26·33	151
	,, (,,) ..... M	,, ,, ,, ...	5	1 0	311 ⅄	26·21	...
	Daventry (Waterloo).....	F. F. Rodhouse, Esq...	5	1 3	436 ⅄	29·93	160
	Earls Barton Vicarage	C. A. Markham, Esq...	5	1 4	280 T	24·90	199
D	Mears Ashby	Rev. J. L. Fawssett ...	5	6 5	339	25·81	193

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	NORTHAMPTON—(*con.*)						
D	Wellingborough (Swanspool)	N. P. Sharman, Esq.	5	0 2	155	23·95	176
D	,, (Croyland Abbey)	E. Sharman, Esq.	5	0 5	...	23·70	182
	Watford Court	C. A. Markham, Esq.	...	...	...	29·46	179
D	Ravensthorpe (Coton Mill)	G. S. Eunson, Esq.	5	1 0	355	26 02	161
	Scaldwell	Capt. R. Soames	...	...	400 ↑	26·09	...
	Burton Latimer Rectory	Rev. W. B. Jacques	5	1 0	280	22·80	143
	Broughton Manor	P. Grundy, Esq.	8	1 3	312 T	24·51	149
	Hazelbeech	C. A. Markham, Esq.	...	...	...	26·07	139
D	Kettering (Sewage Works)	T. R. Smith, Esq., C.E.	8	1 0	199 ↑	25·57	162
D	,, (Queensberry Road)	P. Wallis, Esq.	8	1 3	300	25·37	166
D	,, (Headlands)	C. W. Lane, Esq.	5	1 0	280	24·44	173
	Welford (Salford House)	J. Gee, Esq.	5	1 3	430 ?	27·28	167
	Aldwinkle St. Peter	C. A. Markham, Esq.	...	...	...	23·56	155
	Oundle	J. M. Siddons, Esq.	5	3 4	105 T	21·57	...
	East Carlton	R. T. Greaves, Esq.	5	1 0	321	19·96	...
D	Corby (Weldon Grange)	J. Rooke, Esq.	8	1 0	342 ↑	23·98	193
	Rockingham Castle	Mr. J. H. Brown	5	4 4	400 L	27·66	130
	Wansford (Apethorpe Lodge)	A. Jolly, Esq.	5	0 8	150	20·61	126
	Kingscliffe (Fineshade)	C. A. Markham, Esq.	...	...	...	21·55	...
	Peterborough (Thorpe Hall)	Col. C. I. Strong	5	1 0	30 ?	18·76	...
D	Stamford (Duddington)	F. Coventry, Esq.	5	1 0	153	23·11	196
D	,, (Collyweston)	Baldwin Latham Esq CE	5	1 0	315 T	20·02	157
D	,, (,, House)	Miss Tasker	5	1 0	281 T	23·55	172
D	,, (Easton)	N. Day, Esq.	5	0 9	271 T	21·33	167
D	,, (St. Martin's)	Mr. T. Booth	5	6 0	107 ↑	23·17	155
	Barnack (Walcot Park)	J. G. Dearden, Esq.	5	1 0	...	21·13	152
D	Maxey Vic. [Market Deeping]	Rev. W. D. Sweeting	5	1 0	32 ↑	19·04	165
	,, ,, [,, ,,] M	,, ,, ,,	5	1 0	32 ↑	19·33	...
	HUNTS.						
D	St. Neots (Waresley Park)	Lady C. Duncombe	5	0 11	190	23·95	122
D	,, (Great Paxton)	Rev. A. G. Cane	5	1 0	100 T	22·63	134
	Offord D'Arcy	W. Priestley, Esq.	5	0 9	50	23·65	147
	St. Ives (The Priory)	H. Warren, Esq.	5	1 0	23 T	22·68	156
D	Huntingdon (Brampton)	Miss May Bird	5	1 1	39 T	25·53	166
	,, (Bosworth House)	F. J. Howson, Esq.	5	0 11	...	23·77	113
D	Alconbury	Rev. R. Conway	5	1 0	...	19·95	158
	Whittlesea Mere	A. Lunn, Esq., C.E.	8	1 6	...	21·20	141
D	Yaxley (Norman Cross)	Mr. W. Allen	8	1 0	106 T	22·29	153
	BEDFORD.						
D	Luton (Pumping Station)	A. J. L. Evans, Esq., C.E.	5	1 0	343 ↑	28·17	166
D	Ampthill (Higham Bury)	E. Jekyll, Esq.	5	1 0	310 T	24·66	172
	,, (Silsoe)	H. Trethewy, Esq.	5	1 0	214 T	28·51	146
	,, (Wrest Park)	Mr. G. Ford	5	1 1	...	24·39	...
D†	Aspley Guise (Oaklands)	E. E. Dymond, Esq.	5	1 0	410 T	22·48	161
	Woburn (Crawley Farm)	J. J. Forrester, Esq.	5	3 8	285 T	23·62	127
D	Stotfold [Baldock]	Dr. Swain	5	1 0	220 T	26·57	171

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in	feet.	inches.	
	BEDFORD—(*con.*)						
	Ampthill (Maulden)	S. Street, Esq.	5	1 6	...	23·58	...
D	Woburn (Hulcote Rectory)	Rev. B. Chernocke Smith	5	1 0	310	23·79	142
	Biggleswade (Old Warden)	Mr. G. R. Allis	8	1 2	...	27·09	142
D	,, (Caldecote)	Rev. M. E. Ruston	5	0 10	...	18·14	153
D	Potton (Wrestlingworth)	H. J. King, Esq.	5	1 0	...	24·61	162
	,, Vicarage	Rev. G. E. Gwynne	5	0 10	145	20·13	...
	Sandy (The Lodge)	Rt. Hon Lord Peel	5	1 0	...	21·63	167
D	Bedford (The Grove)	W B. Graham, Esq.	5	1 0	108 T	23·79	137
	,, (St Peter's Street)	W. Godfrey, Esq.	5	1 0	..	23·49	...
	,, (Milton Ernest)	F. Newbery, Esq.	5	5 0	137 ⅄	26·81	129
D	Sharnbrook (Colworth Gardens)	Mr. J. Hoad	5	0 8	250	25·46	124
	CAMBRIDGE.						
D	Odsey [Royston]	H. G. Fordham, Esq.	5	1 0	256 ⅄	23·31	165
D	Foxton House [Royston]	A. P. Humphry, Esq	5	0 10	60 T	22·62	166
D	Abington Pigotts [Royston]	W. G. F. Pigott, Esq.	8	0 8	130	22·00	151
D	Carlton	G. H. Long, Esq.	5	1 0	340 T	20·65	140
D	,, Hall	A. S. Nice, Esq.	5	1 6	..	22·85	156
D	Longstowe Rectory	Rev. J. P. Sharp	5	1 3	227 T	26·97	194
	Trumpington	F. Parsons. Esq.	5	1 0	50	23·51	161
D	,, (Gilmerton)	S. Nutter, Esq.	8	0 9	...	20·94	169
	Granchester Mill	H. G. Fordham, Esq.	5	5 0	31 ⅄	23·74	...
D	Cambridge (Fulbourne Pmpng Sta)	W. W. Gray, Esq.. C.E.	5	1 0	37 ⅄	21·73	184
D	,, (W. W. Cherryhinton)	,, ,, ,,	5	1 0	35 ⅄	20·69	155
	,, (Holm Leigh)	Dr. E. Carver	8	1 5	30	20·92	136
D	,, (Sidney Street)	W. E. Pain, Esq.	8	60 0	92 ⅄	20·68	186
D	,, (Pinehurst)	C. F. Foster, Esq.	5	0 10	36	21·78	197
	,, (Trinity College)	*Registrar Gen. Returns*	8	0 8	40	21·23	176
D†	,, Observatory	Sir R. S. Ball, F.R.S.	5	1 0	84 ⅄	20·37	131
D	,, ,,	,, ,, ,,	8	0 10	84 ⅄	20·34	130
	,, (Quy Hall)	H. G. Fordham, Esq	5	0 5	61	20·62	148
	Newmarket (Cheveley Park)	,, ,, ,,	8	1 6	350	20·17	121
	Cottenham (Bernard House)	A. Bull, Esq	5	2 6	30	20·08	130
D	Ely (Stretham)	Mr. J. Housley	9	4 9	13 ⅄	16·73	125
D	,, (,, Ferry)	Mr. C. Wright, Junr.	8	5 0	...	20·77	132
D	,, (The Palace)	Rev. G. Bullock Webster	5	1 0	64 T	22·62	173
	Mepal Engine	H. G. Fordham, Esq.	5	20 6	25	16·09	109
	Littleport (Highfield House)	H. G. Martin, Esq.	8	2 7	67 T	18·79	119
	Chatteris (Aylesby House)	A. H. Ruston, Esq.	8	0 6	45 ?	21·37	131
	,, (The Priory)	H. F. Fryer, Esq.	5	0 7	45	21·89	113
	,, (Horseway Lock)	A. Lunn, Esq., C.E.	8	15 0	...	17·03	112
	Stanground Sluice	,, ,,	8	1 6	...	19·04	...
	March	,, ,,	9	2 0	...	21·95	131
*	,, (Stags Holt)	W. C. Little, Esq.	5	1 0	11 T	23·36	135
	Upwell (Marmont Priory Lock)	A. Lunn, Esq., C.E.	8	1 1	...	18·99	127
	,, (Euximoor House)	H. West, jun., Esq.	5	0 8	15 ?	21·80	133
	Thorney	A. J. Forrest, Esq.	8	3 6	9 ⅄	19·58	132
D	,, (Wryde House)	S. Egar, Esq.	5	1 0	7 T	22·75	158

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	CAMBRIDGE—(*con.*)						
D	Wisbech (Bank House)	A. Peckover, Esq.	8	0 8	6	21·94	150
D	,, (Monica Road)	W. Climenson, Esq.	8	1 2	6	22·70	150
	Tydd St. Giles	A. H. Roney, Esq.	5	1 6	...	24·25	...

DIVISION IV.—EASTERN COUNTIES.

	ESSEX.						
D	Grays	A. C. James, Esq., C.E.	8	2 3	12 ↑	18·02	153
D	Orsett	W. Powell, Esq.	8	...	...	19·69	138
D	Barking Outfall	Sir A. R. Binnie, C.E.	8	0 6	6 ↑	18·79	163
D	Shoeburyness	The Asst. Super. Expts.	8	2 6	3	16·70	141
	,, M	,, ,, ,,	5	2 6	3	17·27	...
D	West Ham (Abbey Mills)	Sir A. R. Binnie. C.E.	8	1 0	11 ↑	22·30	160
D	Barking Cemetery	C. H. Mills, Esq.	5	1 0	...	21·53	146
D	Southend (Water Works)	C. S. Bilham, Esq.	8	1 0	112 ↑	21·23	125
D	,, (,, ,, Eastwood)	,, ,, ,,	8	1 0	50 ↑	21·44	131
D	Romford (North Ockendon)	Rev. R. T. Crawley	5	1 3	100 T	19·68	154
	Manor Park (Albany Road)	A. J. Wilmshurst, Esq.	5	3 0	...	20·92	...
D	Upminster Hall	Captain Swinton	5	1 0	120 T	20·87	155
	Romford (Hare Street)	W. Bose, Esq.	5	1 0	...	20·52	184
D	Walthamst'w (Prospect Hill Ldge)	J. E. Goodchild, Esq.	5	1 3	140 T	24·43	146
D	,, (Ferry Lane)	W. B. Bryan, Esq., C.E.	8	1 0	30	23·39	139
	Woodford (Hagger Lane)	,, ,, ,,	8	1 0	176 ↑	20·33	139
D	Billericay (Burghstead Lodge)	General Branfill	5	1 0	310 ↑	22·56	175
D	,, (Norsey Manor)	Burnett Tabrum, Esq.	5	1 0	270 ↑	21·93	152
D	Wickford (Runwell Hall)	Col. H. Kemble	5	1 0	75	22·74	159
D	Havering-atte-Bower	Mrs. Pemberton Barnes	5	1 0	...	21·28	170
D	,, Grange	G. P. Hope, Esq.	5	1 0	255 T	23·26	214
	Buckhurst Hill	W. B. Bryan, Esq., C.E.	8	34 0	305 ↑	21·83	144
D	Chingford Mill	,, ,, ,,	8	1 0	40 ↑	22·37	136
	Brentwood (Sawyers Hall)	Rogers Field, Esq., C.E.	5	1 0	270 ↑	24·02	156
D	,, (Shenfield Rectory)	Rev. W. Quennell	5	...	305	23·68	157
D	Loughton (High Beech)	W. B. Bryan, Esq., C.E.	8	1 0	376 ↑	22·88	153
D	Waltham Abbey	,, ,, ,,	8	1 0	62 ↑	23·65	164
D	,, ,, (Gunpr. Factory)	The Superintendent	5	1 6	70	23·33	102
	Epping (The Hemnalls)	J. Nicholl, Esq.	8	0 8	345	27·66	126
	Norton Mandeville (Readings)	C. Clarke, Esq.	5	2 6	316	22·85	117
	Bradwell-on-Sea (Bradwell Hall)	J. C. Chillingworth, Esq.	5	1 1	27	18·93	...
	,, ,, (Down Hall)	R. Page, Esq.	5	1 0	20	21·89	148
D	Danbury Rectory	Rev. J. Bridges Plumptre	5	1 0	365 ↑	21·97	176
D	Writtle (Melbourne)	E. Rosling, Esq.	5	0 9	140 T	20·41	161
	Chelmsford (High Street)	F. Chancellor, Esq.	8	1 0	86 ↑	22·98	156
D	,, (Spergula)	J. C. Thresh, Esq., M.D.	5	1 0	136 T	21·80	152
D	,, (Springfield Place)	Miss Jackson	5	0 11	143 ↑	22·40	169
	,, (Roxwell)	R. W. Christy, Esq.	5	1 0	190 T	22·61	115
	,, (Broomfield)	W. Impey, Esq.	5	1 4	144 T	22 54	...
D	Hatfield Peverel (Cardfields)	A. Rosling, Esq.	8	1 2	76 T	22·59	163

DIVISION IV.—EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
ESSEX—(*con.*)						
D East Mersea Rectory	Rev. A. L. Hunt	5	1 0	56 T	19·89	172
D Harlow (Sheering)	Rev. Canon Hill	5	1 0	214 ⅄	25·56	128
Witham (Little Braxted Hall)	J. Taber, Esq.	5	1 0	50	22·99	160
,, (Freebournes)	J. Wakelin, Esq.	5	0 6	200	23·65	166
Great Leighs	J. H. Tritton, Esq.	...	3 0	140 T	24·49	150
D Fingringhoe (Ballast Quay Farm)	T. B. Grubb, Esq.	5	3 0	70	21·05	137
Colchester (Surrey Villa)	J. C. Hopwood, Esq.	5	1 0	110 T	25·11	135
D ,,	H. Goodyear, Esq., C.E.	8	16 10	82 T	24·42	139
D ,, (Hill House, Lexden)	S. F. Hurnard, Esq.	5	1 0	90 T	21·16	143
,, (,, ,,)M	,, ,, ,,	5	1 0	90 T	21·37	...
D ,, (Home Farm, ,,)	Mr. W. Bird	5	1 0	125 T	20·50	137
D Braintree (Bocking. Fennes)	H. S. Tabor, Esq.	5	1 0	240 T	19·89	161
D ,, (,, Place)	S. Courtauld, Esq.	8	2 3	212 ⅄	22·87	153
Dunmow (Saling Grove)	Capt. J. Nicoll Harrison	8	1 0	290 T	19·43	...
Earls Colne (Chalkney House)	H. F. Hills, Esq.	5	1 0	180 T	20·20	...
D† Harwich (Ramsey)	A. Hempson, Esq.	5	0 6	150	21·36	169
Halstead	The Royal Meteor. Soc.	5	1 0	144	23·22	158
D Manningtree Vicarage	Rev. W. Cree	8	1 0	17 ⅄	23·42	178
Langham Rectory	Rev. T. S. Raffles	5	0 7	134	21·76	133
D Saffron Walden (Newport)	Rev. G. F. Tamplin	5	3 6	208 T	25·38	158
D ,, ,,	S. Leverett, Esq.	5	1 0	199 ⅄	23·49	170
D ,, ,, (Audley End)	Mr. J. Vert	5	1 0	155 T	23·18	193
SUFFOLK.						
D Felixstowe (West View)	S. Alexander, Esq.	5	1 0	70	18·87	148
D† Erwarton Hall [Harwich]	J. A. Hempson, Esq.	8	0 6	75	20·88	131
D† Ipswich (Woolverstone Park)	C. H. Berners, Esq.	8	1 0	100 T	21·34	169
D† ,, (Orwell Park)	Mr. J. Wallis	8	1 0	60 ⅄	22·12	157
†* ,, (Belstead Hall)...*new g.*	A. Harwood, Esq.	8	1 6	120 T	22·34	141
,, (,, ,,)...*old g.*	,, ,, ,,	8	9 0	120 T	21·90	141
D Alderton Rectory	Rev. C. G. Archer	8	2 2	...	19·91	133
D Sudbury (Friars Street)	E. Ransom, Esq.	5	1 7	93 T	21·79	210
D ,, (Newton Road)	J. Alexander, Esq.	5	1 2	130 T	21·48	165
†Ipswich (Bishop's Hill)	G. A. Biddell, Esq., C.E.	5	1 0	104 ⅄	23·29	...
D ,, Museum	F. Woolnough, Esq.	8	0 9	72	22·82	153
D† ,, (Clare Lodge)	E. R. Turner, Esq., C.E.	5	1 0	178 T	23·72	162
Boyton Rectory	Rev. A. Washington	8	2 2	30?	19·14	126
D Cavendish	S. J. Garrett, Esq.	5	1 0	...	23·38	164
Lavenham Hall	W. Biddell, Esq.	5	2 9	220	22·03	...
D Woodbridge Abbey	Capt. Carthew	8	1 2	48 T	19·91	170
† ,, (Co. Asylum, Melton)	Dr. Whitwell	8	1 4	100 ⅄	19·70	113
D† Rendlesham Hall	Rt Hon Lrd. Rendlesham	5	1 0	88 ⅄	18·95	138
D Haverhill (Great Thurlow)	A. Boa, Esq.	5	1 0	241 T	21·02	179
Clare (Stansfield)	J. Slater, Esq.	5	1 0	...	24·36	...
D ,, (Hawkedon Rectory)	Rev. B. P. Oakes	5	3 4	305 ⅄	21·65	192
Ash Bocking Vicarage.....*old g.*	Rev. M. B. Cowell	5	1 0	231 T	24·27	129
,, ,, ,, ...*new g.*	,, ,, ,,	5	3 4	231 ⅄	24·38	129
Parham (The High House)	H. R. Smith, Esq.	5	1 0	93	19·91	...

DIVISION IV.—EASTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter.	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell
				ft. in.	feet.	inches.	
	SUFFOLK—(*con.*)						
D	Aldborough (Aldringham Ho.)	F. Garrett, Esq.	8	4 5	50 B	20·31	161
D	Great Glemham	Col. Bloomfield	5	0 10	80 T	23·42	134
D	Framlingham (Mount Pleasant)	Mr. R. Whitehead	5	1 2	125	21·13	148
D	Little Saxham	Rev. H. I. Kilner	8	0 10	220	24·15	162
D	Bury St. Edmunds (Abbeygate St.)	Mr. O. A. Clark	5	65 0	...	17·95	153
D	,, ,, ,, (Westley) *new g*	R. Burrell, Esq.	5	1 0	226 ⅄	25·39	145
D	,, ,, ,, (Hengrave)	Mr. W. Nichol	5	1 2	91	22·77	...
D	Bacton	C. H. Woods, Esq.	5	1 6	186 T	20·16	174
	Darsham (Sibton)	Col. Ward	5	2 6	86	19·41	149
D	Ixworth (Walsham-le-Willows)	Miss M. C. Martineau	5	1 0	...	21·79	173
	Stradbroke Rectory	Rev. Canon Tate	5	1 3	172 T	22·47	142
D	Southwold	A. C. Herbert, Esq.	5	30 0	71 T	18·49	173
D	,,	,, ,, ,,	8	1 0	44 T	19·29	198
	Ixworth (Barningham)	Miss A. K. Lingwood	8	1 0	136	18·88	...
D	Elvedon Hall	Rt. Hon. Lord Iveagh	5	1 0	130	24·59	215
D	Beccles (Sotterley Hall)	late Col. St. J. Barne	5	0 11	...	20·87	180
D	,, (The Staith)	Clifford Smith, Esq.	5	4 6	...	19·58	156
D	Lowestoft (Bryn-y-Môr)	S. H. Miller, Esq.	5	1 0	86	20·96	166
	,, (,, ,,) M	,, ,, ,,	8	1 0	86	20·23	...
D	,, (The Clyffe, Corton)	J. J. Colman, Esq.	5	1 0	62 L	21·67	156
	Fritton	H. E. Buxton, Esq.	8	0 11	40	20·74	197
	NORFOLK.						
D	Scole Rectory	Rev. F. Page Roberts	5	1 0	90	20·09	183
D	Harleston (Rushall Vicarage)	Rev. C. Gape	5	1 1	117 ⅄	23·82	157
	Santon [Brandon]	Rev. M. A. Gathercole	5	0 10	...	22·48	181
	Ellingham [Beccles]	H. Youngman, Esq.	5	3 0	...	17 69	...
D†	Geldeston [,,]	E. T. Dowson, Esq.	5	1 0	38 ⅄	19·75	182
	,, [,,] M	,, ,, ,,	8	1 0	38 ⅄	18·92	..
D	Saxlingham Nethergate	Mrs. Pitt	8	1 2	...	21·03	161
D	Wymondham	E. B. Pomeroy, Esq.	8	1 3	118 ⅄	20·93	151
	Watton	R. Martin Esq.	5	1 0	166 T	21·87	159
	Hingham	G. Dobbs, Esq.	5	1 1	188	22·02	170
	Norwich (Dunston Hall)	Rev. Canon Du Port	..	...	...	22·66	...
D	Denver	,, ,, ,,	8	1 0	80 ⅄	23·80	161
	Stoke Ferry (Wereham)	G. Read, Esq.	5	2 3	66	25·71	167
D	Wymondham (Hethersett)	Rev. Canon Du Port	6	1 3	163	21·49	131
	Outwell Sluice	A. Lunn, Esq., C.E.	9	...	16	21·54	110
D	Moulton	Rev. Canon Du Port	...	...	...	18·40	154
	Emneth	F. M. Bland, Esq.	6	1 0	6	20·75	137
	Yarmouth (Sailors' Home)	The Meteor. Council	8	4 0	12	20·80	169
D	,, (Market Place) *new g.*	W. C. Steward, Esq.	5	1 0	...	22·08	198
D	Norwich (Postwick Hall)	V. Lanyon, Esq.	5	1 1	5	20·53	131
D	,, (Carrow House)	J. J. Colman, Esq.	5	1 6	35 ⅄	24·70	128
D†	,, (Brundall)	A. W Preston, Esq.	5	1 0	66 ⅄	22·07	192
D†	,, (Thorpe High House)	Rev. Canon Du Port	5	1 0	137 T	20·82	170
D	,, (Essex Street)	F. Dix, Esq.	9	2 6	88 ⅄	21·71	167
D	,, (Ipswich Road)	J. H. Willis, Esq.	5	1 0	110	20·92	172

DIVISION IV.—EASTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which .01 or more fell.
	NORFOLK—(*con.*)							
D	Norwich (Newmarket Road)	J. T. Hotblack, Esq.	8	1	2	89 ⅄	22·94	211
D	,, (Heigham)	J. R. Everitt, Esq.	5	3	2	37 ⅄	21·86	172
	Acle	F. Cufaude, Esq.	5	0	6	51	18·79	...
D	Swaffham	W. H. Plowright, Esq.	5	5	0	250 ⅄	24·32	162
	,, (Homewood)	F. Everett, Esq.	5	2	6	210	24·87	108
	Honingham	Rev. Canon Du Port	...	...		...	20 20	...
D	Sprowston (Oak Lodge)	T. Cozens Hardy, Esq.	5	1	0	101 ⅄	21·60	186
	Taverham Hall	Mr. J. Clutsom	8	1	0	...	20·76	122
	East Dereham	G. H. Cooper, Esq.	8	3	0	161	22·34	127
	Drayton	Miss Howell	5	1	2	50	19·94	108
D	Swaffham (Dunham)	A. G. Copeman, Esq.	5	1	1	320	24·25	186
	Salhouse	Rev. T. F. Boddington	8	1	0	50	21·66	...
	Wiggenhall (Outlet Syphons)	A. Lunn, Esq., C.E.	8	1	6	...	24·53	135
D	Tilney St. Lawrence (Aylmer Hall)	W. B. Parsons, Esq.	8	1	0	9	23·65	199
D	Bylaugh Park Gardens	Mr. G. Beeton	5	1	0	130 T	24·95	172
	Lynn (Valingers Road)	Rev. J. A. Barrow Clough	5	7	0	23 ?	25·15	...
D	Reepham (Whitwell)	F. W. Freeman, Esq.	8	2	0	120	22·48	165
	Cawston	Rev. T. H. Marsh	5	1	0	135 T	23·43	194
	Aylsham (Woodgate)	B. J. W. Purdy, Esq.	5	1	0	100 T	24·40	161
D	North Walsham (Dilham)	Rev. J. A. Lawrence	5	0	8	...	22·63	194
D	,, ,, (Worstead)	R. Cross, Esq.	8	1	0	...	24·14	173
	,, ,, (E. Ruston Grange)	*News-cutting*	...	...		...	20·19	171
	Hillington Rectory	Rev. H. Ffolkes	8	1	0	89 ⅄	26·27	182
D†	,, School	,, ,, ,,	5	3	6	94 ⅄	26·25	182
	Fakenham (Pensthorpe)	W. Hamond, Esq.	5	2	6	153	21·16	132
	Dersingham Vicarage	Rev. E. W. Penny	5	1	0	85	24·62	204
	Cromer (Northrepps Hall)	R. Gurney, Esq.	5	0	4	200	22·57	...
D	Holt (The Yuccas)	Mr. T. A. Craske	5	1	3	210	23·46	187
	,, (Field Dalling)	J. H. Pearson, Esq.	5	1	3	158 T	19·75	152
	Blakeney	C. I. Temple Lynes, Esq.	5	1	3	29	19·67	164

DIVISION V.—SOUTH WESTERN COUNTIES.

	WILTS.							
D	Larmer Grounds [Shaftesbury]	General Pitt Rivers, FRS	5	3	0	500 T	41·19	160
D	Rushmore [Shaftesbury]	,, ,, ,,	5	3	0	500 T	40·88	169
	Landford (Northlands)	Mrs. Wigram	5	1	10	167 ⅄	33·06	180
D	Donhead St. Mary (Charlton Ho.)	Col. G. Best	5	0	7	514	40·43	197
	Broad Chalke	Rev. T. N. Hutchinson	5	1	0	300 T	41·08	154
D†	Alderbury	Rev. Canon Hutchings.	5	0	8	263 ⅄	31·41	167
D	Tisbury (The Academy)	J. Bristol, Esq.	7	0	9	380	38·58	136
	Salisbury (Tintinhull)	J. Lardner Green, Esq.	8	1	0	246 T	32·19	...
D	,, (St. Nicholas)	Rev. A. P. Morres	5	1	0	161 T	33·41	171
†	,, (Wilton House)	T. Challis, Esq.	8	0	5	180 ⅄	35·99	167
D	Winterslow (Roche Court)	T. T. S. Metcalfe, Esq.	5	1	0	459 T	32·50	185
D†	Mere (Dews House)	J. Farley Rutter, Esq.	5	1	7	384	35·07	156
†	,, Vicarage	Rev. J. A. Lloyd	5	3	0	350	34·43	...

DIVISION V.—SOUTH WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WILTS—(*con.*)						
D Mere (Charnage)	A. R. White, Esq.	5	1 0	426 T	34·11	169
D† ,, Down	T. H. Baker, Esq.	5	1 0	702 T	37·98	195
†Maiden Bradley	Duke of Somerset	8	1 6	626 T	41·80	190
D†Warminster (Rye Hill)	S. E. Jefferys, Esq.	8	2 0	466 T	41·20	210
Salisbury Plain (Chitterne House)	R. Hayward, Esq.	11	4 0	319 T	30·11	170
D Warminster (Downside)	Mrs. Stent	8	2 3	393	36·33	189
D Amesbury (Figheldean)	G. Knowles, Esq.	5	1 0	260 T	31·11	181
Ludgershall	Rev. W. H. Awdry	8	0 8	422 R	31·62	178
D ,, (Collingbourne Kingston)	Baldwin Latham Esq CE	5	1 0	470 R	29·35	161
D Market Lavington	Mr. T. Selfe	5	3 0	300	29·87	184
D Trowbridge (Water Works, Biss)	W. W. Gray, Esq., C.E.	5	1 0	311	36·52	168
D ,, (Rood Ashton)	Mr. W. Strugnell	8	1 6	250	31·93	136
D ,, (Wingfield)	T. H. Clark, Esq.	5	1 0	190 T	31·94	149
,, (Steeple Ashton)	W. Cray, Esq	5	1 3	150	34·20	174
D ,, (Rodney House)	W. J. Mann, Esq.	5	1 1	140	29·91	162
,, (Lovemead)	Dr. Tayler	5	1 0	100 T	30·19	169
D Bradford (The Chantry)	Dr. Beddoe, F.R S.	6	0 9	125	31·35	164
D ,, (Holt)	A. J. Beaven, Esq.	5	1 2	120	32·82	186
D Devizes (Wilts Co. Asylum)	Dr. Ireland Bowes	8	2 3	385 R	28·98	166
D Buttermere	Rev. W. E. Burkitt	5	2 6	847	33·82	181
D Burbage (Wolf Hall)	Mr. E. Isaacs	8	1 2	546	33·15	137
Shalbourne (West Court)	Miss Barns	5	1 0	...	32·63	175
D Bishop's Cannings	Rev. C. W. Hony	5	1 0	446 R	31·54	186
D Devizes (Shepherd's Shore)	Mr. J. Carter	5	1 6	555 T	29·81	170
D Chippenham (Lacock)	Miss Awdry	5	0 11	202 T	31·59	187
D Marlborough (Preshute House)	Mr. G. E. Mew	5	0 9	...	32·42	158
,,	The Roy. Meteor. Soc.	5	1 0	450	30·10	...
D ,, (Mildenhall)	Rev. G. Soames	5	1 0	456	32·45	171
D Calne (High Street)	Mr. H. Wilkins	5	3 6	244 T	29·65	194
D ,, (Compton Bassett)	Mr. W. A. Cook	8	1 0	385 T	32·70	182
Yatesbury	Rev. E. D. Guillebaud.	5	3 6	564 R	32·60	...
Ramsbury (The Rookery)	F. C. Batson, Esq.	5	1 0	390 R	25·71	172
D Wootton Bassett	H. Bevir, Esq.	5	1 6	421 T	31·90	183
D†Swindon, New	H. J. Southwell. Esq.	8	0 11	378	29·63	184
Malmesbury (Charlton Cott.)	Lady Victoria Howard	8	1 0	...	39·49	155
Highworth (Hannington Hall)	A. D. Hussey-Freke, Esq	5	1 0	400	24·98	164
DORSET.						
D Portland (The Manse)	Rev. W. R. Waugh	5	1 6	10	25·73	167
Weymouth (Wyke Regis)	Mrs. Pretor	5	0 9	158 B	31·52	147
D Swanage (Gordon Villas)	F. A. Burt, Esq.	5	3 0	65 T	29·08	165
D ,, (Royal Victoria Hotel)	H. B. Vincent, Esq.	5	1 11	26 T	30·01	168
,,	Rev. H Pix	5	2 0	60	31 37	166
Weymouth (The Nothe)	H. S. Eaton, Esq.	5	1 0	79	29·21	149
D ,, (Markham House)	Rev. G. A. Rideout	5	1 3	100	32·33	155
East Fleet (Fleet House)	H. S. Eaton, Esq.	5	1 1	48	30·13	165
Corfe Castle (Creech Grange)	,, ,, ,,	5	1 2	200	36·36	122
D ,, ,, (Furzebrook)	L. W. Pike, Esq.	5	1 2	147 T	35·79	136

DIVISION V.—SOUTH WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
DORSET—(*con.*)						
D Portisham	W. Symes, Esq.	5	1 3	260	32·70	171
D Winterbourne St Martin	Capt. Acland	5	1 0	260 T	40·87	179
D Winterbourne Steepleton	H. Stilwell Esq.	8	1 0	316 ⅄	38·72	184
D Wareham (Castle Gardens)	S. W. Bennett, Esq.	5	2 6	18	31·37	159
,, (Binnegar Hall)	O. C. Farrer, Esq.	5	1 0	65	32·91	157
Winterbourne Herringstone	H. S. Eaton, Esq.	12	3 1	300	33·51	127
Dorchester Water Works	G. J. Hunt, Esq.	8	1 2	315 ⅄	36·19	171
,, (Fordington)	H. S. Eaton, Esq.	5	5 0	200	37·19	161
Poole (Hamworthy)	J. M. Henderson, Esq.	5	1 6	12	28·61	141
D ,, (Parkstone)	R. H. Barnes, Esq.	5	0 11	198 ⅄	32·51	176
,, (,,) ..... *new g.*	,, ,, ,,	5	1 0	198 ⅄	33·24	...
D Bridport (Portville)	H. Gordon, Esq., C.E.	5	1 0	10 T	34·87	167
D ,, (Coneygar)	,, ,, ,,	5	1 0	110 T	36·75	169
D Bere Regis Vicarage	Rev. W. Farrer	5	1 0	160	33·19	171
,, ,, (Bloxworth Rectory)	Rev O. P. Cambridge FRS	5	1 3	205 T	35·23	152
D ,, ,, (,, House)	Col. Cambridge	5	2 0	100	32·40	133
D ,, ,, (Whitelovington)	F. D. Lys, Esq.	8	2 6	150	36·40	187
D Maiden Newton (Cattistock Lodge)	H. Hamilton Palairet Esq	5	1 0	350	43·47	191
Sturminster Marshall (Bailie Ho.)	H. S. Eaton, Esq.	5	0 6	85	35·10	...
D Wimborne (Rowlands)	General Maclean	5	2 6	110 T	32·74	134
D Beaminster Vicarage	Rev. A. A. Leonard	5	1 0	216 T	36·95	185
D Blandford (Whatcombe)	J. Mansel-Pleydell, Esq.	5	0 10	270 ⅄	36 83	175
D Broadwindsor (Hursey House)	Rev G Corbould-Warren	5	0 7	500	43·39	166
D ,, (Blackdown House)	C. E. M. Pinney, Esq.	5	0 9	515	41·76	181
Winterbourne Houghton	H. S. Eaton, Esq.	8	0 6	230	39·85	149
D Cerne Abbas (Melbury)	Mr. R. Rintoul	5	2 6	500	40·30	147
D Beaminster (Chedington)	S. Creed, Esq.	5	1 6	604 ⅄	44·05	195
D* Wimborne Minster (Chalbury)	Rev. G. H. Billington.	5	2 0	338 ⅄	35·37	153
,, ,, (Horton)	Rev. G. Wellington	5	1 0	135 T	37·01	..
Hazelbury Bryan Rectory	Rev. Canon Wheeler	5	1 0	305 ⅄	42·21	169
D Verwood	W. R. Fryer, Esq.	5	3 0	...	36·90	167
D Holwell (Westrow)	Mr. G. Coffin	5	1 0	290 T	37·42	161
D Sturminster Newton (Riverside)	A. R. Hallett, Esq.	5	1 0	200	31·67	142
D Sandford Orcas Rectory	Rev. W. Esdaile	5	1 0	200	33·08	137
Shaftesbury	H. S. Eaton, Esq.	5	1 0	722	34·64	178
D Buckhorn Weston	Rev. W. Hughes D'Aeth	5	1 0	285	31·36	183
D Gillingham	S. H. Stephens, Esq.	5	1 2	244 T	36·11	180
DEVON.						
Salcombe (Prawle Point)	The Meteor. Council	8	1 9	350	37·07	196
D ,, (Shadycombe)	Mr. T. Langmead	8	1 2	20	43·28	152
South Huish	W. Balkwill, Esq.	5	5 6	68 T	36·94	...
D Revelstoke (Membland)	Mr. G. Baker	5	1 0	180 T	42·08	163
Dittisham (Chipton)	Mr. H. Bond	5	1 6	342	45·10	171
D Plymouth (The Hoe)	H. V. Prigg, Esq., C.E.	8	0 10	117 ⅄	40·36	200
D ,, (Freedom Field)	,, ,, ,,	8	0 10	208 ⅄	42·86	191
D ,, (Drake's Reservoir)	E. Sandeman, Esq., C.E.	5	1 0	149 ⅄	39·32	184
D* Devonport (Rowdens Res.)	H. Francis, Esq., C.E.	5	1 0	201 ⅄	36·76	200

DIVISION V.—SOUTH WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
DEVON—(*con.*)						
D Ivybridge (Langham Hill)	Miss Glanville	5	1 0	400 T	50·94	203
D ,, (Blackadon Asylum)..	H. V. Prigg, Esq., C.E.	5	1 0	607	58·41	226
Plympton (Hemerdon) ...*garden*	Rev. G. L. Woolcombe	5	4 0	360	*46·66*	...
,, (,,)*tennis court*	,, ,, ,, ...	5	1 0	365	50 38	...
D South Brent (Great Aish).....	Miss Kingwell	5	1 0	500 T	63·57	222
Bere Ferrers	Rev. F. T. W. Wintle.	5	1 0	100	44·76	195
D Bickley (Roborough Reservoir)..	E.Sandeman, Esq.,C.E.	5	1 0	550 ⅄	46·14	218
D Torquay (Cary Green)	C. Shapley, Esq.	5	1 0	12	36·28	170
,, (Chapel Hill)	A. Chandler, Esq.....	5	1 0	286	34·97	191
D ,, (Grey's Lodge)	late Col. J. R. Currie...	5	1 0	260	37·93	184
D ,, (Watcombe Park)	Col. C. Ichabod Wright	5	1 0	483 ⅄	39·79	196
†Lee Moor Clay Works	T. Martin, Esq.....	8	1 6	950 T	63·19	...
Buckfastleigh (Bossel Park) ...	J. Hamlyn, Esq.....	5	1 0	250	63·08	200
D Meavy (Yelverton)	Dr. H. J. S. Liddell ...	5	7 0	620 T	60·89	198
†Sheepstor Vicarage	Rev. C. H. Crooke.....	5	0 7	730 ⅄	55·06	136
D† ,, (Red Stone).....	E.Sandeman, Esq., C.E.	5	1 0	760 ⅄	56·85	210
D ,, (Burrator)	,, ,, ,,	5	1 0	750	58·38	204
D† ,, (Head Weir).....	,, ,, ,,	5	1 0	690 T	58·50	203
D†Walkhampton (Lowery)	H. Francis, Esq., C.E	5	1 0	890 T	54·08	201
D†Dartmoor (Deancombe Farm) ...	E.Sandeman, Esq.,C.E.	5	1 0	830 ⅄	60·21	179
D† ,, (Leather Tor Farm)...	,, ,, ,,	5	1 0	910 ⅄	59·29	207
,, (Siward's Cross)	,, ,, ,,	5	1 0	1200 ⅄	60·31	...
,, (Cramber Tor)	,, ,, ,,	5	1 0	1435 T	57·10	...
D Kingskerswell (South Hill)	E. A. Foster, Esq. ...	5	1 0	270 T	37·43	193
D Abbotskerswell (Court Grange)..	Mrs. Marcus Hare	5	1 0	130 B	42·31	164
D Ashburton (Holne Vic.)	Rev. J. Gill.....	5	1 6	650	61·91	213
D† ,, (Druid House).....	Fabyan Amery, Esq....	5	1 0	584 T	56·49	189
D Kingsteignton (Teignbridge Ho.)	F. H. Plumptre, Esq...	5	1 2	27 ⅄	39·92	170
Teignmouth (Bitton Street).....	W. C. Lake, Esq., M.D	5	1 0	70	35·24	176
D ,, (Woodlands).....	W. B. Harris, Esq.....	8	1 2	98 T	35·45	177
D ,, (Bonnicliff)	Capt. J. Horner.....	5	1 0	260 T	35·52	182
D†Tavistock (Public Library)	Mr. J. Quick	8	20 0	283 T	48·48	204
D ,, (Rose Villa).....	E. E. Glyde, Esq.....	5	1 0	392 ⅄	52·59	221
Princetown	The Royal Meteor. Soc.	5	...	...	81·93	202
D†Ilsington (Middlecott House) ...	Alfred Lyon, Esq.	5	3 6	649 T	54·48	150
Princetown (Cowsic Valley).....	H. Francis, Esq., C.E.	8	1 6	1352 ⅄	78·45	...
D Chudleigh (Ideford)	Rev. G. J. Ford.....	4	1 0	300 ⅄	40·47	193
Bovey Tracey (Little Bradley)...	Miss C. N. Phillpotts...	5	1 0	120	38·87	164
D ,, ,, (Colehays)	Mr. E. E. Underdown.	5	1 3	415 T	54·17	192
†Milton Abbot (Endsleigh).....	Mr. F. Yole	5	1 0	180 T	52·28	...
D Dawlish (Mamhead Rect.)	Rev. W.C. Plenderleath	5	1 0	467 ⅄	45·00	212
D Exmouth (Nidderdale)	Mrs. Stewart	5	1 0	51	33·89	175
,, (Betworth)	Rev. C. M. Powell.....	5	1 0	115 T	35·47	...
D Chudleigh (Tottiford)	W. Ingham, Esq., C.E.	8	4 0	718 ⅄	51·12	208
,, (Trusham)	Rev. O. H Cary	5	1 0	322 T	43·51	185
D Budleigh Salterton (Ravenshaw)	Col Carlile.....	6	1 0	50	34·63	153
D ,, ,, (Cliff Terrace)	H. Belfield, Esq.	5	0 9	50	35·53	193
D ,, ,, (Syon House).	H. Drummond, Esq....	5	1 0	...	35·03	181

DIVISION V.—SOUTH WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground. ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which 01 or more fell.
DEVON -(*con.*)							
D Budleigh Salterton (Bicton) ...	Mr. Mayne	5	1	0	90	34·03	166
D Kenton (Southtown House)	Major Courtenay	8	2	6	56 ⅄	39·00	182
D Polapit Tamar [Launceston] ...	R. C. Coode, Esq.	5	2	9	315 ⅄	43·36	210
D Christow (W. W., Kennick).....	W. Ingham, Esq., C.E.	8	1	0	842 ⅄	47·68	217
,, (Laployd)	,, ,, ,, ...	5	1	0	1030 ⅄	39·91	...
,, (Blackingstone)	,, ,, ,, ...	5	1	0	1090 ⅄	32·21	...
†Sidmouth (Sidmount)	The Royal Meteor. Soc.	5	1	0	149 ⅄	36·01	...
D Branscombe (Hazlewood)	E. W. Knatchbull, Esq.	5	0	6	...	37·37	176
D*Rousdon [Lyme Regis]	C. E. Peek, Esq.	5	1	0	516 ⅄	37·44	182
* ,, [,, ,,] ..... M	,, ,, ,, ...	3	1	0	516 ⅄	36·04	...
D†Clevelands [Lyme Regis]	Mr. C. W. Bloye	5	1	11	465 ⅄	39·02	190
D Exeter (Devon & Exet. Inst.) ...	A. R. Allinson, Esq. ...	5	13	7	155 ⅄	34·14	187
D† ,, (Manston Terrace)	Miss Dymond	5	1	0	166 ⅄	32 66	183
D†Okehampton (Oaklands)	late W. H. Holley, Esq.	5	1	0	521 T	52·50	185
Exeter (Brampford Speke Station)	Mr. A. Tucker	5	1	0	83	36·45	144
D Honiton (Ivedon)	Col. James	5	1	0	430 T	36·28	195
Hatherleigh (Broomford Manor)	Mr. Hawking	5	1	4	484 ⅄	41·23	179
D Cullompton	T. Turner, Esq.	5	1	0	202 ⅄	38·85	198
D Petrockstow (Heanton Satchville)	Mr. A. Eames	5	1	0	332 T	43·80	207
D Tiverton (Broomhill).....	Mrs. Dickinson	5	1	0	380	42·86	194
D ,, (St. Peter Street)	Miss Gill.....	5	6	0	270	41·56	199
D Otterford (Otterhead)	R. Lewis Lloyd, Esq ..	5	1	0	735 ⅄	40·49	220
D Torrington (Stevenstone)	Mr. W. Gillies	5	1	0	420	46·98	218
D ,, (Little Silver).....	Mr. P. H. Griffin	5	1	0	395	47 79	234
D Romansleigh Rectory	Rev. J. H. Thompson..	5	1	0	590 T	45·22	230
D Bampton (Huntsham)	H. Acland Troyte, Esq..	8	1	0	640	53·00	214
D Hartland Abbey.....	Mr. G. Sleep	5	1	6	222 T	42·70	167
D Alverdiscott (The Firs).....	F. A. Trevan, Esq. ...	5	2	6	330 T	38·84	202
D Abbotsham (Riccard's Down) ...	Mrs. Hibbert	5	1	0	97 ⅄	39·12	214
D South Molton (East Street)	N.C. Hatherly, Esq. M.D	5	1	0	430 B	47·01	226
,, ,, ...	Rev. F. King	5	1	0	505 T	47·55	214
,, ,, (Castle Hill School)	Mr. W. H. Reeve	8	1	0	363	47·80	239
D Bideford (Gammaton W. W.)...	Baldwin Latham Esq CE	5	1	0	335 ⅄	44·41	203
*† ,, (Horwood)	Rev. J. Dene	5	1	0	288 T	35·78	208
,, (Northam, St. Helen's)	Miss L. Bowles	5	0	10	67	34·75	183
D*† ,, (,,)	Rev. Preb. Churchward	5	1	0	173 ⅄	39·22	197
Instow.....	Miss Lock	5	1	0	100 B	35·56	167
D Barnstaple Athenæum	T. Wainwright, Esq....	8	1	0	25 T	42·26	201
,, (Arlington Court) ...	Lady Chichester.....	5	1	1	613 B	58·63	221
D ,, (,, ,,) ...	,, ,, ...	5	1	0	613 B	59·29	219
D Woolacombe	E. Henshall, Esq., C.E.	5	1	0	60 ⅄	39·00	200
Parracombe	Rev. J. F. Chanter ...	5	3	0	795 T	51·24	193
Ilfracombe Hotel..... *new gauge*	The Royal Meteor. Soc.	5	1	0	24	46·36	193
†Lynton (Lee Abbey)	C. F. Bailey, Esq.	5	0	6	320 T	40·22	...
D ,, (Glenthorne).....	W Halliday, Esq.....	5	0	9	93	49·39	180
CORNWALL.							
D Penzance (Morrabs)	Mr. C. H. Benn	5	1	0	55	45·31	215
,, (Penlee)	J. Branwell, Esq.	5	1	0	71 T	47·15	221

DIVISION V.—SOUTH WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter.	Height Above Ground.	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
CORNWALL—(*con.*)						
D Penzance (St. Clare)	Rev. Preben. Hedgeland	5	1 0	213 T	47·75	248
Marazion	T. W. Field, Esq.	5	2 0	30 ?	43·94	199
D Falmouth (New Observatory)	E. Kitto, Esq.	11	2 0	169 T	46·64	207
,, (,, ,,)	,, ,,	8	1 9	169 T	45·86	210
,, (Gyllyngvase)	A. Wilson, Esq.	8	1 0	50	42·05	205
Flushing (Trefusis)	W. Knatchbull, Esq.	5	0 4	300	42·01	...
D Falmouth (Carclew)	Mr. J. Simmons	5	0 9	...	51·45	181
D St. Ives (Phillack Rectory)	Rev. Canon Hockin	5	1 0	70	39·14	210
D ,, ,,	Dr. J. M. Nicholls	5	4 0	138 ⅄	45·81	162
D Redruth (Trevince)	E. B. Beauchamp, Esq.	8	0 8	240 T	46·54	207
D ,, (Tehidy Park)	Mr. A. Mitchell	8	1 1	287 ⅄	45·18	211
D Truro (Killiow)	J. C. Daubuz, Esq.	5	1 0	230 T	50·11	188
D ,, (St. Michael Penkevil)	Rev. A. R. Tomlinson	5	3 0	180 T	45·24	206
D† ,, (Royal Institution)	R. A. Greg, Esq.	5	40 0	56 ⅄	46·57	204
,, (W.W., Lower Tregurrow)	Mr. W. J. Lean	5	0 9	71	44·62	...
,, (Agar Road)	Mr. C. Barrett	...	...	...	51·15	...
Grampound (Heligan)	S. Trevail, Esq.	...	...	...	44·39	...
D Probus (Lamellyn)	H. Tresawna, Esq.	5	0 6	...	44·82	176
St. Agnes	Mr. Opie	5	1 3	278 B	40·47	171
D Fowey (Menabilly)	Mr. W. H. Bennett	5	1 0	150	45·98	173
D†*St Austell (Trevarna)	W. Coode, Esq.	5	0 6	300 ⅄	51·11	232
Par Station (Penellick)	W. E. Geach, Esq.	5	0 9	240 T	36·32	...
Empacombe [Devonport]	J. Sandercock, Esq.	5	0 6	20 T	38·90	194
D Cremyll [,,]	Mr. W E. Marchant	5	20 0	25	36·17	191
D St. John's [,,]	Rev. J. H. Kirwan	5	1 0	20	42·71	183
D Lostwithiel (Lanwithan)	Miss Foster	10	1 0	80	47·02	199
D Newquay (Prospect House)	A. Hardwick, Esq., M.D.	5	1 0	130	39·80	194
Menheniot (Coldrenick House)	E. Jago, Esq.	5	1 4	...	50·33	...
D†Liskeard (Dean Terrace)	S. W. Jenkin, Esq., C.E.	5	1 1	375 ⅄	51·27	221
D ,, (Trevillis)	L. C. Foster, Esq.	5	1 0	300	46·14	204
D ,, (Green Bank)	L. J. Bateman, Esq.	5	1 0	470 T	52·75	220
†Saltash (Pentillie Castle)	Mr. W. T. Johnson	5	2 4	150 B	50·45	200
D†Bodmin (Lanhydrock)	Rev. Prebendary Every	5	1 0	390	53·29	229
D ,, (Treledan)	H. D. Foster, Esq.	...	1 0	...	53·49	163
Liskeard (St. Cleer Down)	S. W. Jenkin, Esq., C.E.	5	1 1	620 T	47·61	...
Callington (Hingston Down)	Mr. Wadge	5	3 0	850 T	48·50	201
†Launceston (Altarnon)	Rev. A. H. Malan	5	1 0	570 B	68·76	251
D ,, (Tamar Terrace)	Captain L. Ching	5	0 10	446	51·44	213
North Tamerton (Ogbeare)	Mr. J. S. Bray	5	4 0	460	39·90	203
D Bude	J. Arthur, Esq.	5	1 0	16 B	41·73	155
D Stratton (Trelana, Poughill)	Col. Field	5	1 0	200 T	45 19	222
,, (,, ,,)	,, ,,	5	1 0	220	44·86	...
SOMERSET.						
Chard (Cricket St. Thomas)	Mr. Lyon	5	1 0	444	42·96	146
D Crewkerne (Bincombe House)	Miss Sparks	5	1 2	293 T	35·92	169
D Yeovil (West Coker)	Major Aldworth	5	1 0	260 T	35·25	207
D ,, (Gas Works)	E. Howell, Esq.	5	1 0	110 T	32·27	159

DIVISION V.—SOUTH WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which .01 or more fell.
	SOMERSET—(*con.*)							
	Ilminster (Bay House)	J. C. Baker, Esq.	5	1	0	215 T	33·93	182
D	,, (White Lackington)	Rev. Prebendry Gowring	5	1	0	136 ⅄	38·37	180
D	,, (Ilton Vicarage)	Rev. R. B. Poole	5	1	0	100 ⅄	31·56	177
D	South Petherton (Bridge)	W. Blake, Esq.	8	0	8	110 T	31·17	173
D	Taunton (Blagdon Hill)	H. T. Coles, Esq.	8	1	6	...	40·36	123
D	,, (Leigh Hill)	,, ,, ,, ...	8	1	6	...	36·77	123
D	Wellington (The Avenue)	F. J. Burnett, Esq.	5	0	10	250 ?	35·26	194
	Temple Combe Rectory	Rev. J. C. Fox	5	0	6	215	39·05	172
D	Taunton (Claremont)	E. Ball, Esq.	8	1	2	80 T	32·46	178
D	Milverton (The Lodge)	late R. Bere, Esq.	5	1	0	198	38·07	187
D	North Cadbury Rectory	Rev. H. A. Boys	8	1	0	256 ⅄	34·77	186
D	Taunton (The Mount, Halse)	Miss Smith	5	1	1	254	37·46	226
D	,, (The Priory, Ash Priors)	Rev. G. S. L. Little	5	1	0	208 ⅄	33·72	168
	Cothelston House	C. E. J. Esdaile, Esq.	5	1	0	430	37·42	178
	Castle Cary (Pitcombe Vicarage)	Rev. D. E. Norton	5	1	2	310 T	39·03	...
D	Somerton (Butleigh Court)	R. Neville Grenville Esq.	8	1	2	80	32·43	148
	Bruton (King's School)	Rev. D. E. Norton	5	0	10	280	36·85	...
	Winsford	W. P. Anderson, Esq.	5	1	2	600	54·21	...
	Glastonbury (Portway, Street)	Miss E. C. Impey	5	21	8	80	27·57	123
D	,, (Street)	W. S. Clark, Esq.	8	1	0	100	30·16	192
	,, (High Street)	J. Spire, Esq.	8	7	0	94 ⅄	32·27	187
D	,, (Ynyswytryn)	Mrs. Swayne	5	1	8	245 T	34·60	189
D	,, (Magdalene House)	J. G. L. Bulleid, Esq.	5	1	6	52 T	31·57	176
D	Bridgwater (Enmore Park)	T. P. Broadmead, Esq.	8	1	9	268	35·21	155
	,, (Nurseries)	H. Corder, Esq.	5	1	0	...	31·64	174
D	,, (Ashford)	F. Parr, Esq., C.E.	...	...		...	32·69	170
	,, (Farm, Stowey)	E R. Case, Esq.	8	5	0	120	30·24	...
	,, (Nether Stowey)	W. D'Oyly, Esq.	5	0	10	211	34·38	157
D	Holford (Woodlands House)	Miss I. L. Joseph	5	0	9	391 T	37·41	196
D	Shepton Mallet (Charlton)	F. H Berryman, Esq.	5	1	0	481 ⅄	41·40	164
D	Wells (The Deanery Gardens)	Mr. A. King	5	1	0	170	36·35	184
	Minehead	Rev. J. Utten Todd	5	1	0	41 ⅄	33·58	177
D	Cranmore (Cranmore Hall)	Sir R. H. Paget, Bt., M.P.	8	1	0	600 T	40·39	196
D	Frome (Mells Rectory)	Mrs. Horner	5	1	0	344 ⅄	38·07	195
D	,, (Orchardleigh)	Rev. W. A. Duckworth	8	0	10	303 T	32·97	179
	Radstock (Downside College)	Rev. O. J. Berkeley	8	1	0	596 T	43·01	...
	Chewton Mendip (The Priory)	Mr. J. Batt	5	1	5	550 T	48·17	184
	,, ,, (Waldegrave Ho.)	J. Hansford Hill, Esq.	10	4	6	450	48·82	187
	Ston Easton	H. E. Hippisley, Esq.	5	3	0	480 ⅄	42·73	183
	Axbridge (Cross)	R. Binns, Esq.	5	0	9	100 ?	33·90	...
	E. Harptree (Sherborne Reservoir)	Bristol Water Works	5	1	0	338 T	40·96	170
D	,, (Harptree Court)	W. W. Kettlewell, Esq.	5	1	0	346 ⅄	45·48	172
	Axbridge (Loxton)	Rev. J. E. Page	8	1	0	120	37·19	137
	,, (Winscombe Court)	Rev. R. F. Follett	8	1	0	180 T	36·44	141
	Radstock (Camerton Court)	Mr. J. Milne	5	1	6	...	39·83	135
D	,, (High Littleton)	Rev. A. M. Foster	5	0	10	442 ⅄	36·64	183
D	Hutton Rectory	Rev. W. F. Rose	5	1	0	75 ?	37·54	180
D	Pensford (Sutton Court)	Sir E. Strachey, Bt.	8	1	0	280	40·54	185

DIVISION V.—SOUTH WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
	SOMERSET—(*con.*)							
	Churchill	S. B. Pumphrey, Esq..	5	1	1	...	36·61	158
	Weston-super-Mare (High St.)..	The Royal Meteor. Soc.	5	1	0	20	31·48	170
D	,, ,, ,, (BeaufortRd.)	W. A. Fussel, Esq. ...	8	5	0	23 T	35·46	171
D	,, ,, ,, (Worle)	St. J. Kemm, Esq.....	5	1	6	...	34·76	168
	Bath (Combe Hay Manor)	F. G. Smart, Esq.....	5	1	0	...	33·56	169
D	Wrington (The Rectory)	Rev. G. M. Ashdown..	5	5	0	68	36·87	173
	,, (West Hay)	Gen. Harrison.....	5	2	0	100 T	39·74	174
	Chew Magna	Bristol Water Works...	5	1	0	160 T	38·92	176
D†	Bath (Royal Institution)	P. Hamper, Esq.	6	8	0	75	33·29	155
D	,, (Charlcombe)	C. Gilby, Esq., C.E. ...	8	2	0	325 T	33·82	168
D	Batheaston	Col. Linley Blathwayt.	5	1	0	166 ⅄	35·41	169
	,, M	,, ,, ,,	5	1	0	166 ⅄	35·91	...
D	,, Reservoir	C. Gilby, Esq., C.E. ...	5	2	0	248 ⅄	35·27	197
	Yatton (Chelvey)	Bristol Water Works...	7	0	6	...	41·11	161
	Barrow Gurney Reservoir	,, ,, ,, ...	5	1	0	320 T	39·60	182
D	Long Ashton Estate Office	T. Dyke, Esq., C.E. ...	8	1	0	134 ⅄	39·20	184
D	Clevedon (Water Works)	E. Button, Esq.....	5	0	9	28 ⅄	34·57	135
	Bristol (Coronation Road)	H. C. Martin, Esq. ...	5	0	10	50	35·79	...
	Wraxall	Rev. H. Vaughan	5	0	11	191	40·63	179
D	Abbots Leigh	H. R. Miles, Esq.	5	1	0	333 T	42·86	173
D	Failand House [Bristol]	Miss Fry.....	12	2	10	...	39·30	194

DIVISION VI.—WEST MIDLAND COUNTIES.

	GLOUCESTER.							
D	Monkswood Reservoir [Bath] ...	C. Gilby, Esq., C.E. ...	5	2	0	365 T	33·61	198
D	Bristol Docks (Underfall Yard) .	J.M.McCurrich,Esq,CE	8	19	6	45 T	36·21	180
	,, (Small Street)	Bristol Water Works...	12	33	10	52	38·62	158
D	Clifton (Royal York Crescent). .	Miss Bridge	5	8	2	226 T	38·87	202
D	,, (Cecil Road)	Miss Hooper	5	1	5	230	38·24	185
D	,, (Pembroke Road)	R. F. Sturge, Esq. ...	8	1	0	215	37·85	183
D	,, (College)	D. Rintoul Esq.	8	1	2	230	38·91	176
	Bristol (Hampton Lodge)	J. H. Dix, Esq.....	5	1	0	310	46·60?	180
	,, (Redland Green)	T. D. Sibly, Esq.	5	1	3	282	39·07	191
D	,, (The Grove, Fishponds)...	H. H. Harding, Esq....	5	1	0	160 T	35·36	180
	,, (Cote House)	H. St. V. Ames. Esq...	8	1	3	243 ⅄	39·76	...
D	Horfield (H.M. Prison)	J.E. Prichard, Esq., MB	5	0	10	202 ⅄	35·55	158
	Pucklechurch	Rev. S. G. Gillum.....	5	0	10	370 T	36·87	179
D	Filton	F. W. Gayner, Esq. ...	5	2	0	266	35·16	162
D	ChippingSodbury(FramptonCotl)	J. Marsh, Esq.	5	1	6	180 ⅄	34·36	171
D	,, ,, (StanshawesCt)	R. N. Hooper, Esq. ..	5	1	3	280 ⅄	35·49	165
D	Bristol (Over Court Park)	R.C.C. Lippincott, Esq.	5	0	9	147	38·56	193
D	,, (,, ,, Garden)	,, ,, ,,	8	1	0	137	37·34	184
D	Almondsbury	Rev. C. O. Miles.....	5	1	6	144	36·15	174
D	Wickwar Rectory	Rev. R. J. Lyon	5	2	0	260 ⅄	35·03	168
	Alderley	Gen. Hale	5	1	0	310 T	38·00	...
	Tortworth Court	Mr. T. Shingles.....	8	1	0	264	34·89	179

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	GLOUCESTER—(*con.*)						
D	Tutshill [Chepstow]	P. F. Legh, Esq.	5	1 0	196 T	36·68	181
	Dursley (Farnley)	R. W. Pinney, Esq.	5	0 10	251 T	36·43	140
D	Fairford (Kempsford)	A. T. Iles, Esq.	5	1 0	...	25·21	172
D	,, (Horcott)	R. A. Iles, Esq.	5	2 6	...	26·14	150
D	Berkeley (Castle Gardens)	Mr. R. Shore	5	1 6	62 T	33·16	153
D	,, (Sharpness New Docks)	F. A. Jones, Esq., C.E.	8	3 9	50	31·51	163
D	Lechlade	T. Arkell, Esq.	5	0 9	253	24·71	145
	,, (Southrop)	,, ,, ,,	...	1 0	...	26·15	153
D	Lydney (Clanna)	Capt. Marling	5	1 0	260 T	40·83	178
D	,, (Priors Mesne)	H. Cook, Esq., M.D.	5	1 6	500 T	42·78	190
D	Cirencester (Roy. Agricultl. Coll.)	C. C. Duncan, Esq.	5	1 0	443 ⊼	32·79	183
D	,, (Further Barton)	Miss Brown	5	1 0	422 ⊼	34·27	181
D	Stroud (Stanley Park)	W. J. Paley Marling, Esq	8	1 0	365 T	34·77	180
D	,, (The Acre)	P. Witchell, Esq.	5	1 0	300	33·71	164
D	,, (Upfield)	Miss Stanton	5	1 0	226 ⊼	33·20	188
	,, (The Slad)	A. Stephens, Esq.	5	1 0	420	31·83	...
D	Fairford (Hatherop Rectory)	Rev. R. P. Davies	8	1 3	411 ⊼	30·23	190
D	Whitminster	F. A. Jones, Esq., C.E.	5	1 0	32 ⊼	30·59	165
	Haresfield Court	Mr. S. Pearce	5	1 0	100	29·09	175
	Coleford (The Coombs)	R. Tyrer, Esq.	5	1 0	660	48·82	222
	Newnham-on-Severn	D. J. Wintle, Esq.	5	1 3	56 ⊼	36·77	...
D	Westbury-on-Severn (Chaxhill)	H. S. Grant, Esq.	5	1 0	120 T	31·57	165
D	Great Barrington	H. J. Barrett, Esq.	5	1 6	430 T	28·88	160
	Northleach (Sherborne House)	Mr. Scott	5	1 0	405	31·91	164
	Gloucester (Quedgeley House)	W. G. Robinson, Esq.	5	1 0	65 T	28·30	180
D	,, (Birdlip Hill)	A. S. Helps, Esq.	5	1 0	800 B	29·74	181
D	,, (Witcombe Res.)	R. Read, Esq., C.E.	8	3 0	297 ⊼	27·49	145
D	Mitcheldean (Blaisdon)	P. Stubs, Esq.	5	1 0	117 ⊼	34·43	207
	,, (,,) M	,, ,,	5	1 0	117 ⊼	34·32	...
D	Gloucester (Hempsted)	F. A. Jones, Esq., C.E.	5	1 6	70 ⊼	26·44	192
D	,, (Llanthony Lock)	E. D. Marten, Esq., C.E.	5	1 2	39 ⊼	25·06	151
D	,, (Lower Barton Street)	W. P. Brown, Esq.	5	1 0	65 ⊼	26·13	163
	,, (Churcham)	L. H. Hall, Esq.	5	2 1	90	29·47	154
D	,, (Wotton Asylum)	Dr. Johnson	8	0 9	90 ⊼	25·68	158
D	Cheltenham (Dowdeswell)	J. Hall, Esq., C E	5	1 0	357	32·77	193
	,, (,,)	A. E. Moss, Esq.	5	0 11	500	34·36	...
D†	Gloucester (Maisemore Lock)	E. D. Marten, Esq., C.E.	5	1 1	39 ⊼	23·55	171
D	Bourton-on-the-Water	E. W. Kendall, Esq.	5	1 0	434 T	32·94	181
	,, ,, ,, (Chardwar)	G. F. Moore, Esq.	5	1 6	434	32·33	190
D	Cheltenham (Battledown)	Sir Brook Kay, Bt.	5	0 8	393 ⊼	27·81	177
D	,, (Northfield)	J. Hall, Esq., C.E.	8	5 0	637 ⊼	25·66	183
D	,, (Hewletts Res.)	,, ,, ,,	8	1 6	419 ⊼	29·91	183
D	,, (Sandford)	,, ,, ,,	5	2 8	210	25·82	160
D	,, (Naunton Pk. Villas)	M. Llewellyn Evans, Esq	5	0 9	240	27·10	198
D	,, (Heath Lodge)	Rev. M. A. Smelt	8	1 0	206	26·65	183
D	,, (Southam Villa)	R. Tyrer, Esq.	5	1 0	184 ⊼	26·23	191
	,, (,, ,,) M	,, ,, ,,	5	1 0	184 ⊼	24·56	...
	Stow-on-the-Wold (Oddington)	Rev. H. B. Heberden	5	0 9	400	28·13	...

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Day on which ·01 or more fell.
			ft. in.	feet.	inches.	
GLOUCESTER—(*con.*)						
D Moreton-in-Marsh (Longbro)*new*	W. Arkell, Esq.....	5	1 0	...	33·19	162
D†Tewkesbury (Upper Lode)	E.D. Marten, Esq., C.E.	5	1 0	41 ⅄	28·71	137
D ,, ...	J. Hall, Esq., C.E.....	5	0 10	47	24·49	142
D ,, (Beckford)	F. Slade, Esq., C.E. ...	8	1 0	120 ⅄	26·04	176
HEREFORD.						
Wyastone Leys [Monmouth] ...	J. M. Bannerman, Esq.	6	1 0	220 T	38·81	183
Ross (Bishopswood)	,, ,, ,, ...	6	1 0	120 T	35·23	192
D ,, (Croome Hall)	W. E. Hancock, Esq...	8	4 0	288 ⅄	31·34	172
D† ,, (The Graig)	H. Southall, Esq.	5	1 0	213 ⅄	30·51	188
Upton Bishop (The Baches).....	W. Hogarth, Esq.....	5	1 0	300	26·88	146
Ross (Perrystone Court)	Mrs. Clive	5	1 3	...	27·64	178
Much Dewchurch (Bryngwyn)...	SirJ.Rankin,Bart.M.P.	5	0 9	416 T	35·50	186
D Much Marcle (Homme House) ...	Mr. J. Maxton	5	0 11	280 T	27·69	146
D ,, ,, (Caerswall)	T. Charles, Esq.....	5	1 0	423 B	29·84	180
D Fownhope (Morney Cross)	O. E. Cresswell, Esq....	5	1 5	...	25·82	153
D†Ledbury (Orchardleigh)	M. A. Wood, Esq.....	5	3 0	180	25·08	169
D ,, (Underdown)	S. H. Bickham, Esq....	5	1 0	307 ⅄	26·62	179
,, (,,) .....M	,, ,, ,, ...	5	1 0	306 ⅄	26·02	...
,, (Putley Court)	J. Riley, Esq.....	5	1 0	290	29·26	176
Hereford (Bullinghope).....	Rev. Preb. Elliot	5	1 0	...	28·73	162
D ,, (Breinton Court).....	H. A. Wadworth, Esq.	5	1 0	238 T	27·46	184
,, (St. Michael's Priory)..	Rev. J. O. Smith	8	1 0	291 ⅄	28·03	167
D Lugwardine (The Laurels)	Mr. C. J. Johnstone ...	5	1 0	...	26·23	176
Yarkhill Vicarage.....	Rev. A. G. Jones	8	...	190	26·41	169
D Canon Frome Vicarage	Rev. M. Hopton.....	8	1 3	252 T	24·55	183
D†Malvern Hills (Upper Wych) ...	BaldwinLatham EsqCE	5	1 0	1006 ⅄	26·34	151
D Hereford (Burghill Court)	Miss E. D. Woodhouse	5	0 10	275 ?	28·59	194
,, (,,) ..... No. 3	C.S. Morrison, Esq. M.D	5	1 0	275	26·67	177
D Brinsop Vicarage	Rev. A. Relton	5	1 0	285 T	25·20	155
Bodenham Vicarage	Rev. H. C. Sturges ...	5	0 9	240	26·00	...
D Hope-u-Dinmore (Hampton Ct.)	J. H. Arkwright, Esq..	8	1 2	212 B	26·69	174
D Weobley (Dilwyn)...	T. L. Hall, Esq., M.D.	5	0 8	290 T	27·02	189
D Kington (Lynhales)	S. Robinson, Esq.	8	1 0	566	33·24	196
D ,, (Belmont)	E. Bird, Esq.....	5	1 0	...	34·80	193
D ,, (Gravel Hill)	Col. G. F. Pearson.....	5	0 8	540 T	34·62	224
D Pembridge (Marston)	H. Langston, Esq.....	5	1 5	347 ⅄	29·13	183
D Bromyard (Buckenhill).....	R. Phipps, Esq.....	8	1 9	...	27·22	140
D Leominster (Farm)	Mrs. Southall.....	5	1 6	268	26·83	185
SHROPSHIRE.						
D Ludlow (Ashford).....	Rev. J. Selwood Tanner	5	1 2	265 T	24·98	184
D ,, (,, House)	W. Downes Hall, Esq.	5	0 5	315 T	28·08	197
D ,, (The Sheet)	R. P. Dansey, Esq. ...	5	1 0	370 T	28·12	189
D Cleobury Mortimer (The College)	J. Davis, Esq.	5	1 6	440 T	26·58	185
D Bromfield (Priors Halton).....	Miss Beddoes	5	1 0	300	27·99	226
D ,, Vicarage	Rev. W. Selwyn	5	1 0	300 T	26·77	202

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground.	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	SHROPSHIRE—(*con.*)						
	Craven Arms (Stokesay Vicarage)	Miss La Touche	5	1 0	371 ⊼	25·86	170
D	Bridgnorth (Coton Hall)	E. M. Wakeman, Esq..	5	1 2	460 T	25·87	151
	Bishop's Castle (Totterton)	W. H Whitaker, Esq.	5	0 7	...	27·42	...
	,, ,, (Castle Street)...	E. Griffiths, Esq.	5	2 0	720 B	28·02	201
D	Bridgnorth (Quatford)	Rev. W. J. Pinckney...	5	1 0	170 T	23·16	180
D	Church Stretton (Burway Ho.)...	H. Barnett, Esq., M.D.	5	1 0	675 ⊼	31·35	199
	Bridgnorth (Cantreyn Bank) ...	Rev. H. M. Stallybrass	6	3 9	320 ⊼	25·71	168
D	,, (Aldenham Park) ...	W. De Wend Fenton, Esq	5	3 9	430 T	24·73	139
	Church Stretton (Preen Manor)...	A. Sparrow, Esq.	5	1 0	700 T	26·00	188
D	,, ,, (Woolstaston)	Rev. E. D. Carr	5	1 0	800 ⊼	28·12	198
D	Middleton Chirbury	Rev. W. Brewster.....	5	1 2	702 ⊼	24·19	220
D	Much Wenlock (Willey Park)...	Rt. Hon. Lord Forester	5	1 0	502 ⊼	24·42	171
D	Pontesbury (Somerville)	W. R. Croft, Esq.	5	1 6	355 T	24·87	144
	Minsterley (Hampton Hall)	J. Whitaker, Esq.....	...	1 0	630 T	24·21	...
D	,, (Wallop)	J. E. Severne Esq. ...	8	1 3	700 T	29·54	198
D	Shifnal (Neachley)...	Hon F. Bridgeman ...	5	1 6	280 T	27·01	192
D	,, (Haughton Hall)	Mr. A S. Kemp	5	3 0	355	26 30	161
D	Shrewsbury (The Abbey House)	Miss F. Rouse Boughton	8	1 3	171 ⊼	19·46	172
	Newport (Edgmond).....	J. Bodenham, Esq. ...	8	1 0	261 T	24·13	194
D	Wem (The Clive Vic.)	Rev. J. Cooper Wood	5	1 0	299 ⊼	23·19	217
D	Cheswardine (Knighton Res.) ..	G. R. Jebb, Esq., C.E	8	0 3	351 ⊼	27·62	197
	Market Drayton (Buntingsdale).	Mrs. Tayleur	5	1 0	276 ⊼	24·87	...
D	,, ,, (Fernleigh) ...	J Beaumont Piercy, Esq.	5	1 0	310 ⊼	25·36	189
	Ellesmere (Oteley).....	Mr. Pearse	8	1 8	292	24·63	195
D	Adderley Rectory	Rev. A. Corbet	5	0 9	290 T	25·15	186
	STAFFORD.						
	Dennis [Stourbridge]	E.B. Marten, Esq., C.E.	8	6 6	270 B	26·34	187
D	Netherton (Lodge Farm Res.) ...	G. R. Jebb, Esq., C.E..	5	1 0	445 ⊼	24·61	180
D	Dudley (Shavers End)	H. A. Hill, Esq., C.E .	5	1 0	744 T	25·80	179
	Handsworth	A. E. Ellis, Esq.	5	1 0	440 T	25·97	...
D	West Bromwich.....	A D Greatorex Esq., CE	8	4 6	547 T	28·31	160
D	Wombourne (The Bratch)	Baldwin Latham Esq CE	5	0 9	271	27·85	203
	Wednesbury (Ocker Hill).....	E. B. Marten, Esq., C.E.	...	...	...	24·47	172
	Walsall	,, ,, ,,	8	4 0	463 ⊼	31·50	198
D	,, Sewage Farm	R H. Middleton, Esq CE	8	0 11	376 ⊼	28·29	150
D	,, (Wednesbury Sewage Wks.)	T. Wicks, Esq.	5	2 8	381 T	25·53	192
	Wolverhampton (Graiseley) ...	K. C. Berrington, Esq.	5	0 9	506 ⊼	27·67	196
	,, (Town Hall) ...	J.W. Bradley, Esq. C.E.	5	15 6	481 ⊼	26·83	168
	,, (West Park) ...	,, ,, ,,	5	1 0	432 ⊼	26·88	186
D	,, (Tettenhall) ..	R. T. Smith, Esq., C.E.	5	1 0	475 ⊼	25·34	215
D	,, (Wrottesley) ...	Mr. E. Simpson	8	1 0	500	23·55	158
D	Tamworth (Bonehill House)	Major Chichester	5	1 0	289 T	25·50	177
D	Bloxwich (Sneyd Res.)	G. R. Jebb, Esq., C.E..	5	1 0	507 ⊼	25·96	153
D	Hammerwich (Cannock Chase Res)	,, ,, ,, ...	5	1 0	475 ⊼	26·73	191
	Weston Park [Shifnal]	Rt. Hon. Earl of Bradford	5	1 6	400 T	25 57	190
D	Brewood (Belvide Res.)	G. R. Jebb, Esq., C.E.	8	1 0	367 ⊼	26·01	150
	Lichfield (Maple Hayes)	A.O. Worthington, Esq.	...	...	380	26·66	...

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
STAFFORD—(*con.*)						
D Penkridge (Rodbaston)	H. Ward, Esq.	5	1 0	324 ⅄	27·33	177
D Hednesford	H. A. Hill, Esq., C E.	5	1 0	750 ⅄	25·49	177
Shugborough	Rt. Hon Earl of Lichfield	5	1 0	260	32·40	203
D Burton (Rangemoor)	Mr. Bennett	5	5 6	424 T	28·99	190
D ,, (Shobnall)	Messrs. Bass & Co.	5	5 0	156 T	23·72	161
D ,, (Hoar Cross)	F. W. Lycett, Esq.	8	4 0	400 T	30·10	170
D Salt Vicarage	Rev. S. W. Jones	8	0 8	266	30 74	190
D Uttoxeter (Brook House)	Mr. J. J. Gibbons	5	1 0	283 ⅄	31·57	218
D Market Drayton (Old Springs)	F. E. Harding, Esq.	5	0 8	422	27·65	189
D Maer Hall Gardens	Mr. J. Harris	5	1 6	...	32·92	224
D† Cheadle (The Heath House)	J. C. Philips, Esq.	5	1 0	647 ⅄	32·82	191
D Longton (The Meir)	J. B. Piercy, Esq.	5	1 0	618 ⅄	32·72	199
D Newcastle (Madeley Vic.)	Mr. W. Pye	5	1 0	347 ⅄	28·15	162
D Stoke (Hartshill)	J. Knight, Esq.	5	1 0	485 ⅄	32·48	194
,, (Stanley Reservoir)	E. B. Smith, Esq., C.E.	5	3 1	550 T	22·93	158
Etruria	,, ,, ,, ,,	5	4 2	440	31·96	121
Alstonfield Vicarage	Rev. W. H. Purchas	5	1 0	910	40·78	154
D Leek (Wall Grange)	J. B. Piercy, Esq.	5	1 0	458 ⅄	36·35	183
Knypersley [Congleton]	E. B. Smith, Esq., C.E.	5	3 1	550 T	40·62	157
Leek (Rudyard)	,, ,, ,,	5	12 7	500 ⅄	33·40	102
WORCESTER.						
Northwick Park	Lady Northwick	8	1 6	410 ⅄	30·02	...
D Bredon's Norton	G. C. Norman, Esq.	8	1 0	200 T	27·41	183
Upton-on-Severn (Willow Bank)	J. S. Cowley, Esq.	5	1 3	...	27 42	158
,, ,, (The Eades)	E. Tennant, Esq.	5	0 9	100 T	26·82	169
D Evesham (Lansdowne)	R. Burlingham, Esq.	5	5 0	108 T	23·15	116
Gt. Malvern (British Camp Res. S.)	H. P. Maybury, Esq. C.E	...	...	677	28·16	154
,, ,, (,, ,, ,, N.)	,, ,, ,,	...	...	677	26·10	..
D† ,, ,, (Church Street)	,, ,, ,,	5	1 0	361 ⅄	29 05	150
D† ,, ,, (Belle Vue House)	A. Mander, Esq	5	4 0	520	28·23	164
† ,, ,, (Madresfield Rect.)	Rev. G. S. Munn	5	1 4	124 ⅄	28·11	163
D† ,, ,, (,, Court)	Mr. W. Crump	8	2 6	135 T	26·77	150
D Leigh Lodge	Insp.-Gen. M. W Cowan	5	1 3	110 T	24·46	174
D† Worcester (Diglis Lock)	E. D. Marten, Esq., C.E.	5	1 0	49 ⅄	25·42	180
,, (Belmont Road)	G. B Wetherall, Esq.	5	1 6	175	24·14	169
D† ,, (Bevere Lock)	E. D. Marten, Esq. C.E.	5	1 1	52 ⅄	23·65	170
D ,, (Hawford Lodge)	F. Ames, Esq	5	1 1	70	26 48	152
D† Droitwich (Holt Lock)	E. D. Marten, Esq., C.E.	5	1 1	55 ⅄	23·79	142
,, ...	T. P. Baylis, Esq., C.E.	5	4 0	161 ⅄	27·51	128
D Tenbury (Rochford)	Rev. J. Tomson	5	1 0	317 ⅄	29·33	178
D Redditch (Prospect Hill)	H. Page, Esq., M.D.	5	1 0	425 T	28·37	195
D Bromsgrove (Stoke Reformatory)	Mr. J. Salter	5	5 0	225 L	21·26	162
D ,, (Tardebigge Res.)	F. A. Jones, Esq. C.E.	5	3 0	433 T	27·47	183
D† Stourport (Lincombe Lock)	E. D. Marten, Esq., C.E.	5	1 0	62 ⅄	24·91	163
D Alvechurch (The Uplands)	J. Grubb, Esq.	5	3 0	600 ?	26·74	163
D Bromsgrove (Lower Bittal Res.)	F. A. Jones, Esq. C.E.	5	3 0	430 T	27·61	171
D Bewdley (Winterdyne Gardens)	Mr. W. Wrather	8	2 0	...	25·99	158

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	WORCESTER—(*con.*)						
D	Kidderminster (Woodfield)	Rev. J. R. Burton	5	3 0	167	23·91	165
D	,, (Prospect Hill)	Mr. J. T. Cowderoy	...	5 9	161 ⅄	20·87	169
	Stourbridge (Pedmore)	E.B. Marten, Esq., C.E.	8	0 11	350 ⅄	27·54	186
	,, (Longlands)	,, ,, ,,	...	...	...	26·22	185
D	Northfield (Longbridge)	Mrs. Impey	5	0 9	560 T	30·18	166
	King's Heath (Brandwood Ho.)	G. F. Lyndon, Esq.	5	1 0	548 ⅄	30·93	...
	Selly Oak Cemetery	Mr. W. Garden	5	1 4	540 T	30·61	177
	Moseley (Woodstock Road)	C. J. Fowler, Esq.	5	2 4	440 ⅄	29·38	182
	Dudley (Trindle House)	E.B.Marten, Esq., C.E.	8	1 0	575	29·82	199
	WARWICK.						
	Long Compton (Weston Park)	H. A. Warriner, Esq.	8	3 10	510 T	25·92	158
D	Shipston (Compton Wynyates)	J. Sargent, Esq.	5	2 6	480	26·28	200
	Farnborough	Miss Prater	5	1 0	520 T	30·94	189
	Fenny Compton (The Grange)	Miss E. C. Knott	5	4 0	436	27·19	...
D	Stratford-on-Avon (Guild Street)	Rev. F. Smith	12	4 0	135 T	24·87	162
D	Alcester (Ragley Hall)	TheMarquis of Hertford	5	1 0	260 T	26·91	163
D	,, (,, Gardens)	Mr. A. Christie	5	1 0	150 T	27·80	188
	Snitterfield	R. Dixon, Esq.	5	1 0	304 ⅄	26·47	148
D	Warwick (Barford Rectory)	Rev. C. Mills	8	0 11	167 ⅄	26·25	185
	Southam	E. Turner, Esq.	5	1 0	304	24·95	109
	Leamington (The Parade)	J. Barnitt, Esq.	5	4 8	195 ⅄	23·23	155
	Henley-in-Arden (Barrells Park)	T. H. G. Newton, Esq.	5	1 0	318 ⅄	28·52	158
	Warwick (Hatton Vicarage)	Rev. H. Trethewy	5	1 0	384 T	29·76	177
	Milverton (Latmos)	Rev. E. Healy	5	1 2	191 T	26·26	...
D	Kenilworth (The Spring)	W. Evans, Esq.	5	1 0	312 ⅄	26·42	190
	Rugby (Dunchurch Hall)	A. H. Harrison, Esq.	5	3 0	...	24·89	...
	,, (Temple Observatory)	E. Kitchener, Esq.	5	1 3	383 T	24·80	154
D	Coventry (City Hospital)	E. H. Snell, Esq., M.D.	8	1 0	266 T	26·79	161
	,, (Priory Row)	J. Gulson, Esq.	8	1 3	279 ⅄	28·19	182
D	,, (Stoke)	,, ,, ,,	8	1 3	241 T	26·27	179
D	,, (Kingswood)	R. B. Caldicott, Esq.	8	1 0	340 T	28·60	162
D	Shirley	B. Boothroyd, Esq.	5	1 0	466 T	30·62	195
	Sparkbrook (Grantham Road)	F. O. Lane, Esq.	5	1 0	410 T	30·14	...
D	Birmingham (Sheldon Rectory)	Mrs. Jones Bateman	8	1 0	323	32·75	177
D	,, (Edgbaston)	A. Cresswell, Esq.	8	1 0	535	28·25	159
D†	,, (Botanic Gardens)	Mr. Latham	5	5 2	505 T	27·06	185
D	,, (The Crescent)	J. J. Gilbert, Esq.	5	21 0	495 ⅄	24·40	153
	,, (,, ,,) ...M	,, ,, ,,	5	7 0	480 T	28·10	...
D	Bedworth Cemetery	Mr. D. Bosworth	5	1 0	385 T	27·63	153
D	Castle Bromwich Hall	Mr. G. M. Allcock	5	1 2	363 ⅄	31·24	166
D	Witton Reservoir	E. Anty Lees, Esq.	5	2 6	347	27·38	170
D	Whitacre (Birmingham W.W.)	,, ,, ,,	5	1 3	269 ⅄	27·11	203
	Sutton Coldfield (Ladywood)	F. Rathbone, Esq.	5	0 8	500	30·17	...
D	Atherstone	BaldwinLathamEsq CE	5	1 0	286 ⅄	26·72	174

DIVISION VII.—NORTH MIDLAND COUNTIES.

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
	LEICESTER.							
	Lutterworth (Walcote)	Major Corbet Smith	5	0	6	390 T	25·05	...
	Fleckney	J. B. Putt, Esq.	5	1	0	411 T	28·22	...
D†	Kibworth Beauchamp	E. V. Phillips, Esq.	5	2	6	355 T	25·22	164
D	Hallaton Hall	Mr. Huggard	8	1	3	324	22·59	127
D	Leicester (Town Hall Square)	E.G.Mawbey,Esq.,C.E.	9	1	7	212 ⅄	21·76	158
D	,, (,, ,, ,,)	,, ,, ,,	5	0	6	211 ⅄	21·86	157
	,, (Humberstone Asylum)	J.E.M.Finch,Esq.,M D	8	1	0	244 ⅄	22·35	213
D†	Thornton Reservoir	F. Griffith, Esq., C.E.	8	1	2	371 ⅄	25·36	166
D	Thurcaston Rectory	Rev. T. A. Preston	5	1	0	253 T	21·55	155
D	,, (Cropston)	F. Griffith, Esq., C.E.	8	1	0	246 ⅄	25·80	185
D	Syston	S. K. Daniels, Esq.	5	1	6	180 T	24·13	166
D	Swithland (The Brand)	F. Griffith, Esq., C.E.	8	1	0	...	21·70	154
D	Ratcliffe-on-Wreake College	Rev. J. Cremonini	5	1	0	288 T	20·87	134
D	Rotherby Hall	the late J. Hames, Esq.	5	1	0	240 T	22·68	222
	Ashby-de-la-Zouch (Cole Orton)	Rev. Canon Beaumont.	5	3	0	480	26·36	...
D	Loughborough (Nan Pantan Res.)	A.H. Walker, Esq., C.E.	8	1	0	269 ⅄	27·05	170
D	,, (Forest Road)	W. Berridge, Esq	5	0	9	147 ⅄	23·92	178
	,, (,, ,,)	,, ,, ,,	8	1	0	147 ⅄	23·89	178
	Burton-on-the-Wolds	Lord Percy St. Maur	...	...		...	23·95	145
	Prestwold Hall	Hussey Packe, Esq.	8	0	9	209 ⅄	25·01	167
D	Waltham-le-Wolds	Mr. Higgens	5	1	0	568	25·13	169
	†Belvoir Castle ..... *old g.*	W. H. Divers, Esq.	8	1	0	260 T	22·87	...
D	,, ,, ... *new g.*	,, ,, ,,	8	1	0	260 T	25·16	194
	RUTLAND.							
D	Uppingham (West Deyne)	Rev. G. H. Mullins	8	1	6	485 ⅄	23·60	166
	Ketton Hall [Stamford]	F. Coventry, Esq.	5	...		130	20·25	125
	Tinwell, South View [Stamford]	H. Edwards, Esq.	5	1	1	...	22 52	135
	Burley-on-the-Hill	Mr. W. Temple	8	1	0	506	26·19	141
D	Market Overton	Miss Grace Wingfield	8	0	11	475 T	23·02	133
	Stocken Hall	Capt. P. F. Tillard	5	1	0	365 T	26·13	161
	LINCOLN.							
D	Market Deeping (Wilsthorpe)	J. C. Gill, Esq., C.E.	8	3	10	55 ⅄	20·44	168
	Long Sutton	Mr. J. Tilson	5	4	0	18	23·99	158
	Spalding (Pode Hole)	Mr. W. Grigg	12	1	0	20 ⅄	23·63	...
	Grantham (Stainby)	Rev. W. A. H. Thorold	5	0	9	496	24·84	...
D	,, (Denton Manor)	Sir W Welby Gregory Bt.	5	1	6	275 T	26·61	235
D	,, (Little Ponton Rect.)	Rev. P. R. Worsley	5	1	0	250 T	28·76	203
	,, (Saltersford)	H. Preston, Esq.	5	0	6	188 ⅄	23·88	157
D	,, (Guildhall)	F. J. Morris, Esq.	5	13	6	202 ⅄	23·09	141
D	,, (High Street)	Messrs. H. & W. Bird	...	...		...	22·93	153
	,, (Heydour Vicarage)	Rev. Canon Deedes	5	1	10	244 T	23·36	...
	,, (Syston Park)	Mr. J. Ashby	5	1	0	200	24·49	201
D	Boston (Black Sluice, Skirbeck)	H. Clarke, Esq., C.E.	8	1	3	19 L	22·77	143
D	,, (Grand Sluice)	C.G.W.Phillips,Esq,CE	8	8	0	18	24·26	176
D	,,	W.H.Wheeler,Esq.C.E	5	6	6	25 ⅄	21·81	159
	Sleaford (Rauceby Hall)	Col. M. Willson, C.B.	5	0	6	125 T	26·06	151

DIVISION VII.—NORTH MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
LINCOLN—(*con.*)						
D Leake (Lade Bank Engines)	C.G.W.Phillips,Esq,CE	8	1 0	10 ⅄	20·75	133
D Stubton [Newark]	G. Nevile, Esq.	5	4 6	94 T	21·48	121
D Fulbeck	Rev. V. F. Willson	5	0 11	180 ⅄	24·07	170
Leadenham	Rev. V. E. Skrine	10	4 0	154 ⅄	22·46	125
Sleaford (Bloxholm)	Mr. W. Lumsden	5	1 6	20	23·37	113
D Carlton-le-Moorland	J. Brocklebank, Esq.	5	1 2	49	23·91	132
Kirkstead	Mr. R. H Brett	5	1 3	...	20·84	...
,, (Woodhall Spa)	C.J.Williams,Esq.,M.D	5	1 0	37 T	22·32	...
D Skegness	H. V. Tippet, Esq.	8	1 8	10 L	24·53	137
D Horncastle (Miningsby)	J. Shaw, Esq.	5	2 0	135 ⅄	22·64	118
D Spilsby (Hagnaby Priory)	Miss Pocklington	8	1 8	47 ⅄	24·36	118
D ,,	Dr. J. W. Walker	5	1 0	160 T	25·34	188
D ,, (Boston Road)	Mr. J. J. Rainey	5	1 0	130 T	22·91	160
D ,, (Hagworthingham)	Mr. R. Wright	5	1 1	252 ⅄	29·29	189
D ,, (Dalby Grange)	W. Wright, Esq.	5	1 6	250	24·78	172
D Horncastle (Bucknall)	W. Carter, Esq.	5	1 0	50	22·89	135
D Lincoln (Branston)	A.S.Leslie Melville,Esq	5	1 0	122 ⅄	22·16	126
D† ,, (Boultham)	Mr. F. Terrill	5	1 0	18 ⅄	26·15	152
D ,, (Moorlands,Skellingthorpe)	Major Warrener	5	1 2	27 T	26·29	149
† ,, (St. Botolphs)	A. M. Swift, Esq.	5	1 2	25 ⅄	23·27	...
,, (St. Catherine's)	J. H. Teague, Esq.	5	5 0	33 T	25·46	...
D ,, (Doddington)	Rev. R. E. Cole	5	1 2	92 ⅄	22·74	159
,, (Station)	Gt. Central R. Co.‡	9	3 6	26	23·09	148
D ,, (The Close)	C. J. Bromhead, Esq.	8	1 0	185	23·45	200
,, (D'Isney Place)	A.H.Leslie Melville Esq	4	1 0	215 L	25·08	174
D ,, (Brayford Wharf)	Mr. J. W. Horton	5	5 8	28 ⅄	23·68	171
,, (The Quarry)	R. Swan, Esq.	8	1 8	165 T	23·54	169
,, (Skellingthorpe Hall)	A. H. B. Coupland, Esq.	5	1 0	...	24·44	138
D Horncastle (Hemingby)	Rev. E. S. Bengough	5	1 0	158	24·64	166
Alford (The Burial Ground)	Mr. E. Hodgson	5	1 0	29 ⅄	24·30	...
D Farforth (Maidenwell House)	Miss H. E. Browne	5	1 0	380 T	26·34	189
Gate Burton	Gt. Central R. Co.	9	3 6	96	23·19	134
Fillingham Manor	Mrs. G. E. Sandars	5	1 11	110 T	22·74	...
D†Louth (Gospelgate)	T. W. Wallis, Esq.	5	6 0	111 ⅄	26·13	173
† ,, (Westgate)	Dr. F. Fawssett	5	0 9	120 ⅄	26·21	174
D Market Rasen	Mr. W. B. Jevons	5	0 8	84	23·64	135
,, ,,	Gt. Central R. Co.	9	...	100	18·81	140
,, ,, (Tealby)	The Meteor. Council	5	4 0	255	23·77	158
D Yarborough (The Rectory)	Rev. S. Bateman	5	0 9	42 T	23·34	165
Gainsborough	Gt. Central R. Co.	9	...	76	18·71	142
Stockwith	,, ,, ,,	9	3 6	21	20·50	167
D North Thoresby Rectory	Rev. H. Garrett	5	1 0	46 T	22 56	176
Caistor (Cabourne)	Rev. R. Thomas	5	...	...	27·77	...
Brigg	Gt. Central R. Co.	9	3 6	16	22·75	169
D ,,	A. Atkinson, Esq.,C.E.	8	1 2	11 ⅄	25·28	152
D Grimsby (Waltham)	Rev. W. Tuckwell	5	1 0	50	23·58	163

‡ Kept for the Canals Department of the Great Central Railway Company.
Returns supplied by G. Taylor, Esq.

DIVISION VII.—NORTH MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea level	Depth of Rain. 1897	Days on which .01 or more fell.
				ft. in.	feet.	inches.	
	LINCOLN—(*con.*)						
	Grimsby	Gt. Central R. Co.	9	15 0	42	19·72	137
	Barnetby	,, ,, ,,	9	3 6	51	25·21	136
D	N. Level Engine [Thorne Donc'st'r]	A. L. Peace, Esq., C.E.	5	2 3	...	22·86	169
	Crowle (Keadby)	Gt. Central R. Co.	9	...	17	19·00	105
D	Burton on Stather Vicarage	Rev F. A. Jarvis	5	0 6	212 T	24·02	139
D	Horkstow	E. J. Turton, Esq.	5	0 10	...	27·31	152
D	West Halton	Rev. R. D. Pierpoint	5	1 6	0	23·97	176
	Ferriby Sluice	A. Atkinson, Esq., C.E.	5	1 0	18 ⊼	24·77	131
	New Holland	Gt. Central R. Co.	9	3 6	18	20·34	149
	NOTTS.						
D	Kingston Hall [Loughborough]	Mr. W. English	5	0 8	...	23·37	157
	,, Fields (Dairy Institute)	B. N. Wale, Esq.	5	0 10	...	22·93	...
D	Plumtree (Normanton-on-Wolds)	T. A. Hill Esq.	8	1 0	170 T	22·85	163
	Cropwell Bishop (Cropwell Grove)	H. Smith, jun., Esq.	5	1 1	160 T	22·88	...
	Bramcote	H. H. Enfield, Esq.	5	3 6	292 T	25·98	216
	Bingham (Whatton Manor)	M. H. Hall, Esq.	5	1 5	101 T	22·97	160
D	Nottingham (Beeston Fields)	G. Fellows, Esq.	5	0 9	206 ⊼	25·61	184
D	,, (The Castle)	A. Brown, Esq., C.E.	8	1 2	192 ⊼	23·73	161
	,, (,, ,,)	,, ,, ,,	8	76 0	268 ⊼	20·56	157
D	,, (Carisbrook Ho., The Park)	W. Bradshaw, Esq.	5	1 0	247	24·20	168
	,, (Ropewalk ,,)	A. Brown, Esq., C.E.	..	1 3	230	23·30	...
	Radcliffe-on-Trent	T. Yates, Esq.	5	1 0	...	23·78	...
	,, ,, ,, (Chestnut Ho.)	Mr. J. Green	8	2 0	...	24·16	...
D	Nttnghm (Stoke Bardolph Sew Fm)	Mr. J. Avis	8	10 0	83	21·86	175
D	,, (Strelley Hall)	T. L. K. Edge, Esq.	8	1 0	396 ⊼	24·35	181
D	,, (,,)	,, ,, ,,	5	1 0	379 ⊼	23·51	167
D	,, (Mapperley Hill)	E. Powell, Esq.	8	1 0	400 T	25·17	150
	,, (Basford)	A. Brown, Esq., C.E.	8	0 10	169 ⊼	22·67	165
	Bulwell (Springfield)	G. W. Walker, Esq.	5	0 9	166 ⊼	24·78	...
	,, (Bestwood)	A. Brown, Esq., C.E.	8	1 5	317 ⊼	23·52	155
D	Eastwood Colliery	Mr. E. Lindley	5	1 0	245 T	25·86	170
D	Hucknall Torkard (Forge Mills)	J. D. Walker, Esq.	5	1 0	200 ?	23·02	188
D†	Gonalston Rectory	Rev. F. H. Paley	5	1 0	70	24·28	190
	Southwell (Oxton Hall)	A. Brown, Esq., C.E.	...	0 9	182	24·76	...
	Papplewick (Water Works)	,, ,, ,,	8	0 10	317 ⊼	24·81	168
	,, Hall	F. A. Smith, Esq.	5	0 7	321 T	26·63	...
	Annesley (Selston W.W.)	Messrs G. & F. W. Hodson	5	1 0	475 ⊼	26·66	187
	Newark (Averham Rectory)	Rev. J. Walker	5	1 0	50	21·99	...
D†	Farnsfield	Dr. Wills	5	1 0	210 T	23·90	165
	Sutton-in-Ashfield W.W.	Messrs G. & F. W. Hodson	5	1 0	462 ⊼	25·90	108
	Mansfield (W.W. Rainworth)	,, ,, ,,	5	1 0	360 ⊼	27·46	127
	,, (Market Place)	Mr. P. J. Shacklock	5	1 0	350	29·81	189
	South Collingham	E. Turton, Esq.	5	1 0	...	23·85	...
D	South Scarle	Rev. E. C. Shawfield	5	1 4	52	21·86	145
D	Ollerton (Thoresby Gardens)	Mr. A. Henderson	8	0 9	125	22·47	147
D	Worksop (St. Cuthbert's College)	T. Hedworth, Esq.	7	1 11	123	20·22	161
	,,	Gt. Central R. Co.	9	3 6	127	21·32	167

DIVISION VII.—NORTH MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above Sea Level feet	Depth of Rain. 1897 inches.	Days on which 01 or more fell.
	NOTTS—(*con.*)							
	Worksop (Osberton Gardens) ...	Mr. R. Scott	5	4	0	70	20·72	135
	Retford	Gt. Central R. Co.	9	3	6	52	19·99	181
D	,, (Morton Hall)	W. H. Mason, Esq. ...	5	1	0	140	22·49	133
D	,, (Babworth Hall)	Col. Denison	5	0	6	92 ⅄	21·62	116
D	Worksop (Hodsock Priory)	H. Mellish, Esq.	8	1	0	56 ⅄	22·55	185
	,, (,, ,,) .....M	,, ,, ...	5	1	0	56 ⅄	21·97	...
	The Gardens [Bawtry Hall] ...	L. T. Baines, Esq.....	5	1	0	31 T	24·22	...
D	Hesley Hall [Tickhill]	B. I. Whitaker, Esq....	8	0	11	61 T	23·14	186
	DERBY.							
	Stanton House [Burton]	J. L. P. Barber, Esq...	5	1	0	210	26·15	208
	Winshill [Burton].....	A. J. Brown, Esq.....	5	1	0	261 T	27·66	...
D	Melbourne (The Grange)	Miss Tasker	5	0	3	...	26·38	169
D	,, Vicarage	Rev. Canon Singleton ..	5	2	0	...	27·84	177
D	,, (The Hollow)	Mr. W. Garratt	5	1	0	182 ⅄	24·26	157
D	Chellaston	H. Chambers, Esq.....	5	1	0	...	24·80	186
	Findern (The Longlands).....	Rev. B. W. Spilsbury..	5	0	9	186 ⅄	25·36	...
D	Etwall (Blakeley Lodge)	Mr. R. Giles	5	1	0	190	24·57	141
	Mickleover(County Asylum) ...	R. Legge, Esq., M.D...	5	5	6	300 T	24·08	178
D	,, Manor	Mr. J. Campbell	5	2	0	280	26·38	137
	Derby (Wild Street).....	Messrs. J. Davis & Son	5	1	0	174	28·05	201
D	,, (Midland Railway).....	W. Langdon, Esq.....	5	1	5	156 ⅄	25·14	175
D	,, (Arboretum)	R. Harrison, Esq., C.E.	8	1	0	196 ⅄	26·55	186
	,, (Duffield Road)	Dr. Copestake.....	5	8	0	192 ⅄	24·02	170
D	Breadsall Lodge	W. B. Woodforde, Esq	5	1	3	280 T	26·85	211
	Duffield (Castle Hill House).....	Messrs. J. Davis & Son	...	...		...	26·03	187
	Hazelwood (Chevin)	Sir J. G. N. Alleyne, Bart.	5	4	0	515 ⅄	27·85	...
D	Belper (Northfield).....	J. Hunter, Esq., C.E....	8	0	8	225	33·93	190
D	Codnor (Cross Hill)	A. F. Pine, Esq.....	5	0	10	372	26·42	157
D	Alderwasley ..... *old g.*	A. F. Hurt, Esq.	5	5	5	541 ⅄	35·49	174
D	,, ...	,, ,, ,, ...	5	1	0	537 ⅄	36·47	174
	†Matlock Bath	Mrs. Chadwick	5	1	6	500 T	33·01	...
	,, Dale (Tor House)	J. H. Hay, Esq.....	5	1	6	600	34·65	...
D†	,, (The Gables)	R. Wildgoose, Esq. ...	5	1	0	459 T	35·44	188
D†	Darley (Whitworth Inst.).....	J. H. Dawson, Esq. ...	5	1	2	361 ⅄	37·36	199
D†	,, Hall.....	A. Clay, Esq.....	5	1	8	400 T	33·64	218
	Stretton (Lindway Res.)	Mr. Peers	5	4	3	447 ⅄	20·96?	140
	Hardwick Hall	Mr. Wilson.....	8	2	6	594 T	29·43	182
D	Grassmoor Colliery	J. Norman, Esq.	5	19	10	370 ⅄	20·60	169
D	Chatsworth Gardens	W. Chester, Esq.	8	5	5	442 T	32·40	219
	†Chesterfield (Gas Works)	Chesterfield Corporation	5	1	0	279	25·95	163
	,, ...	Gt. Central R. Co.....	9	3	6	251	25·68	172
†	,, (Linacre Reservoir) *newg.*	Chesterfield Corporation	5	1	0	490	28·80	169
D	,, (Tapton Grove).....	Mr. Bloxham	5	3	3	400	23·93	122
D†	Buxton (Devonshire Hospital)...	The Royal Meteor. Soc.	5	1	0	986 ⅄	52·23	218
	Tideswell (Sterndale Ho., Litton)	W. F. Jackson, Esq. C.E.	5	4	0	999 ⅄	37·90	172
	†Comb's Moss	Gt. Central R. Co.....	9	3	6	1669 T	39·10	...
†	,, Reservoir	,, ,, ,, ...	9	3	6	710 T	37·81	229

DIVISION VII.—NORTH MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground. ft.	in.	Height Above Sea level feet.	Depth of Rain. 1897 inches.	Days on which 01 or more fell.
DERBY—(*con.*)							
†Chapel-en-le-Frith	Gt. Central R. Co.	9	3	6	965 T	38·29	222
†Killamarsh (Norwood)	,, ,, ,,	9	3	6	238 T	25·52	197
D Strines (Higher Cliffe)	R. G. Brothers, Esq.	5	1	0	700 ⅄	33·07	184
D Glossop Hall	Lord Howard of Glossop	8	1	5	533 T	38·49	167
Woodhead Station	Gt. Central R. Co.	9	3	6	878 T	47·62	222

DIVISION VIII.—NORTH WESTERN COUNTIES.

CHESHIRE.							
D Baddiley (Nantwich W. W.)	Baldwin Latham Esq CE	5	1	0	231	26·38	170
D Nantwich (Dorfold Hall)	J. A. Saner, Esq., C.E.	8	1	6	190	26·27	170
D ,, (Reaseheath Hall)	,, ,, ,,	8	1	0	130	27·31	176
D Sandbach (Malkins Bank)	Messrs Brunner Mond & Co	5	3	8	244 ⅄	22·74	189
Aldford (Woodhouse)	W. H. Phillips, Esq.	5	1	1	43 ⅄	23·48	168
D Eaton Hall Gardens	Mr. N. F. Barnes	5	3	0	64 ⅄	23·77	175
Eccleston	E. Wells, Esq.	5	1	1	94 ⅄	24·44	179
,, Rectory	Rev. A. G. Robins	5	6	0	83 ⅄	24·88	189
D Congleton (Buglawton Vic.)	Rev. W. Besant	8	5	0	347 T	27·69	164
Bosley Reservoir	Gt. Central R. Co.	9	3	6	590 T	29·84	198
,, Minns	,, ,, ,,	9	3	6	1210 T	38·20	197
Macclesfield (Wincle)	E. B. Smith, Esq., C.E.	5	3	0	500	37·13	171
D Chester (Christleton Hall)	Mr. T. Weaver	5	1	2	142 ⅄	25·08	192
,, (Northgate Station)	Gt. Central R. Co.	9	3	6	84 T	23·73	157
D ,, (Parkgate Road)	Rev. J. C. Mitchell	5	1	0	60 ⅄	25·41	192
D† ,, (The Nurseries)	Messrs. Dicksons	5	1	0	62 ⅄	23·39	158
D ,, (Hoole Lodge)	Mrs. Hamersley	5	1	0	108 ⅄	24·65	188
D ,, (Upton Lawn)	Mrs. Logan	5	2	6	...	22·00	155
D Middlewich	Messrs Brunner Mond & Co	5	3	10	138 ⅄	25·74	186
,, (Bostock Hall)	Col. France Hayhurst	5	2	0	157 ⅄	29·93	161
D Macclesfield (The Park)	Mr. J. Dale	5	1	0	501 T	35·65	191
,,	Gt. Central R. Co.	9	3	6	539	41·65	202
D Chelford (Astle Hall)	G. Dixon, Esq.	5	1	0	250 T	29·94	171
,, (,, ,,) M	,, ,, ,,	8	1	0	250 T	29·12	...
Northwich	Gt. Central R. Co.	9	3	6	76 T	28·13	140
D ,, (Highfield)	J. A. Saner. Esq., C.E.	8	3	4	118 ⅄	31·52	208
D ,, (,,) *Snowdon*	,, ,, ,,	8	1	0	115 ⅄	31·93	207
D ,, (Winnington)	Messrs Brunner Mond & Co	5	3	8	80 ⅄	31·48	218
D Macclesfield (Swanscoe Park)	T. C. Horsfall, Esq.	5	1	0	676 ⅄	37·25	211
D*Neston (Hinderton)	Reginald Bushell, Esq.	5	1	0	215 ⅄	25·22	181
* ,, (,,) M	,, ,, ,,	8	1	0	215 ⅄	25·67	...
* ,, (,, Lodge) M	,, ,, ,,	5	1	0	145 ⅄	25·24	...
Bollington (Spond's Hill)	Gt. Central R. Co.	9	3	6	1279 T	34·62	...
D Hooton Grange	W. H. Jones, Esq.	5	1	0	110 ⅄	29·81	170
D Wilmslow (Southside)	G. Pearson, Esq.	8	1	0	255 T	36·05	173
,, (Poplar House)	J. Holden, Esq.	5	1	0	237 ⅄	35·67	200
†Whaley	Gt. Central R. Co.	9	3	6	602 T	40·66	209

DIVISION VIII.—NORTH WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
	CHESHIRE—(*con.*)							
	Disley (Lyme Park).....No. 1	T. Molyneux, Esq.....	9	3	8	720 ⅄	48·69	178
D	,, (,,).....No. 2	,, ,, ,, ...	12	2	9	674 ⅄	34·23	182
D	Runcorn (Weston Point)	J. A. Saner, Esq., C.E.	8	2	4	18	31·49	172
	Thurstaston (Dawpool).....	T. H. Ismay, Esq.....	...	...		...	26·92	...
D	West Kirby (Caldy Manor)	Mr. W. Neish.....	5	1	0	129 L	24·43	153
D	,, ,, (Greenfield)	H. Bell, Esq	5	1	0	75 T	26·28	187
	Bowdon (The Firs).....	R. Swindells, Esq., C.E.	5	1	0	215 ⅄	34·59	...
D	,, (Erlesdene)	E. J. Sidebotham, Esq.	5	1	0	211 ⅄	28·68	190
	,, (,,) .....M	,, ,, ,,	5	1	0	211 ⅄	33·60	...
D	Thelwall (Highfields)	T. G. Rylands, Esq. ...	5	1	0	118 ⅄	31·46	186
	,, (,,) .....M	,, ,, ,, ..	5	1	0	118 ⅄	31·68	...
D	,, (Millington House)	L. W. Reynolds, Esq..	5	1	0	85 ⅄	32·15	192
	Altrincham (Norman's Place).....	A. Griffiths, Esq.	5	7	0	150 T	38·11	167
	,, (Barrington House).	C. E. Newton, Esq ,C.E.	8	3	0	105	34·22	...
D	Cheadle (Harthill).....	R. A. Grundy, Esq. ...	5	1	0	142 T	34·41	173
	Hoylake (The Chase, East)	J. F. Leigh Clare, Esq.	5	1	0	29 T	25·44	170
†	Birkenhead (Bidston Obs.)	W. E. Plummer, Esq..	8	1	0	189 ⅄	28·58	189
D	Northenden (Wythenshawe).....	T. E. Tatton, Esq. ...	5	1	0	114 T	32·20	153
	Marple Top Lock	Gt. Central R. Co.....	9	3	6	543 T	33·55	185
	,, Aqueduct	,, ,, ,, ...	9	3	6	321 T	34·45	203
	New Brighton (Rutland House)..	W. Bell, Esq.....	5	1	0	130 B	29·66	184
	Godley Reservoir	G. H. Hill, Esq., C.E..	12	2	0	500	28·45	...
	Newton	Gt. Central R. Co.....	9	3	6	396 T	30·78	164
	Mottram (Hill End)	,, ,, ,, ...	9	3	6	680 T	36·28	188
D	Hadfield (Millbrook).....	Mr. S. H. Doxon	8	3	10	442 T	38·34	212
	,, (,,).....	,, ,, ,, ...	12	4	0	442 T	38·91	212
	Arnfield Reservoir.....	G. H. Hill, Esq., C.E..	12	2	6	550	40·03	...
†	Rhodes Wood Reservoir	,, ,, ,, ...	12	1	0	520	41·31	...
†	Torrside Reservoir.....	,, ,, ,, ...	12	1	6	680	41·34	...
	Staleybridge (Swineshaw).....	,, ,, ,, ...	8	3	0	884 ⅄	46·07	...
†	Woodhead Reservoir.....	,, ,, ,, ...	12	0	10	660	45·39	...
	LANCASHIRE.							
D	Garston (Grassendale Park).....	Miss E. C. Abraham ...	5	1	0	35 T	32·17	197
D	Aigburth (Kelton).....	J. Sing, Esq.	5	1	0	150 T	31·73	195
D	,, (Holmfield)	Miss Maxwell.....	5	1	0	100 T	31·53	202
D	Gateacre (The Nook).....	P. C. Hall, Esq.....	5	1	0	90 T	34·72	197
D	Warrington (Howley)	T. Longdin, Esq.	10	0	10	19 ⅄	33·39	199
	,, (Central Station) ...	Gt. Central R. Co.....	9	3	6	59 ⅄	29·72	173
	,, (Fever Hospital) ...	J. H. Gornall, Esq., M.D.	5	1	0	...	31·51	182
	Liverpool (St. John's Gardens)..	The City Engineer ...	9	2	3	48 ⅄	28·17	170
D	,, (,, ,,)..	,, ,, ,, ...	5	0	9	47 ⅄	28·23	168
	,, (Smithdown Road) ...	,, ,, ,, ...	5	2	0	135 ⅄	31·34	179
	,, (Breeze Lane)	,, ,, ,, ...	5	0	9	135 ⅄	34·75	181
	,, (Grove Park)...	J. R. Darsie, Esq.....	3	6	0	160	30·39	167
	,, (Huskisson Station) ...	Gt. Central R. Co.....	9	3	6	40 ⅄	32·04	185
D	Heaton Mersey [Stockport]	W. B. Leigh, Esq.....	5	3	11	218 ⅄	30·58	189
D	Heaton Moor [Stockport] *new g.*	Dr. F. W. Jordan.....	5	1	0	235	32·32	201

DIVISION VIII.—NORTH WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	LANCASHIRE—(*con.*)						
D	Manchester (Withington) No. 2	J. King, jun., Esq. ...	5	1 3	110 T	32·20	183
D	,, (,,) No. 3	,, ,, ,, ...	8	1 6	110 T	31·87	183
D	,, (Stretford)	H. Royle, Esq., C.E....	5	1 0	86 ⅄	33·04	200
	,, (Urmston Sewage Works)	T. de C. Meade, Esq. C.E.	8	2 6	72	33·25	197
D	,, (Lady Barn, Fallowfield)	Miss C. Herford.....	5	1 0	122 T	29·76	194
	St. Helens (Victoria Park)	F. Drew Harris, Esq...	8	1 0	152	33·68	177
	Denton Reservoir	G. H. Hill, Esq., C.E..	12	2 0	324 T	30·54	...
	Gorton.....	,, ,, ,,	12	2 0	263 T	30·41	...
D	Manchester (Plymouth Grove)...	J. F. Roberts, Esq. ...	5	4 2	150 ⅄	33·09	177
†	,, (Piccadilly)	Gt. Central R. Co.....	9	40 0	194 T	30·35	164
	,, (Fairfield)	,, ,, ,, ...	9	6 0	312 T	33·77	207
D	,, (Oldham Road)	Dr. Niven	5	1 0	191 ⅄	35·66	199
D	,, (Alexandra Park) ...	J. Casartelli, Esq.....	8	3 0	120 T	31·20	180
	Eccles (Worsley New Hall)	Mr. W. B. Upjohn	8	8 0	80 L	27·66	155
D	,, (,, Old Hall)	W. Bourke, Esq., C.E.	5	1 0	185 ⅄	37·20	187
	Blundellsands (Park Corner) ...	T. M. Reade, Esq. C.E.	5	1 0	36 ⅄	31·37	...
D	Manchester (Newton Heath).....	J. Warren, Esq.	5	1 0	275 ⅄	38·80	195
D	,, (Cheetham Hill).....	W B Worthington Esq CE	5	1 0	264 ⅄	36·48	199
	Ashton (Waterhouses)	Gt. Central R. Co.....	9	3 6	345 T	38·87	195
	Prestwich Asylum.....	The Meteor. Council ...	8	1 0	295	39·06	201
	,, Reservoir	G. H. Hill, Esq., C.E...	12	2 0	356 T	34·72	...
	†Oldham (Gas Works)	C. J. Batley, Esq., C.E.	5	4 0	600 T	45·93	...
	,, (Honeywell Lane)	Gt. Central R. Co.....	8	...	553	43·52	225
	,, (Brushes Clough).....	G. H. Hill, Esq., C.E.	5	4 0	930 T	47·58	...
	,, (,, ,,) *new g*	,, ,, ,, ...	5	5 0	955 T	46·16	...
	Ormskirk (Aughton Springs) ...	the late G. Cooke, Esq.	5	0 6	150	35·23	...
D	Wigan Waterworks	W. Bolton, Esq.....	8	1 6	225 T	35·94	199
D	Dalton (Ashurst Beacon)	J. Baxendell, Esq.	5	1 9	540 T	36·66	176
D	Bolton (The Park)	W. W. Midgley, Esq..	5	1 0	390 T	42·70	217
	,, (Heaton) .....*new gauge*	R H Swindlehurst Esq CE	5	1 0	500	42·95	234
D	,, (Ash Lawn, Heaton). ...	F. Taylor, Esq.	5	1 0	406	45·91	217
D	,, (Moss Bank)	Col. R. H. Ainsworth...	8	1 6	530 ⅄	48·90	204
D	,, (Smithills Hall)	,, ,,	8	1 2	535 T	45·84	157
	†Milnrow (Piethorne, Kitcliffe)...	C. J. Batley, Esq., C.E.	5	4 6	767	42·42	176
	,, (,, Coldgreave)	G. H. Hill, Esq., C.E.	5	4 2	894 T	41·06	...
	†Rochdale (Deeplish Hill)	J. H. Lancashire, Esq.	5	1 0	475 T	45·40	207
D†	,, (Park Observatory) ...	Dr. Henry	8	0 6	472	48·23	221
D†	,, (Fieldhead)	S. S. Platt, Esq., C.E..	8	12 0	484 ⅄	46·10	206
	†Bury (Gin Hall) .....*old gauge*	R. B. Rigby, Esq.....	8	1 0	475	44·76	177
†	,, (,, ,,) ..... *No. 2*	,, ,, ,,	8	1 0	475	45·16	177
D	Ormskirk (Rufford)	T. Hobkirk, Esq.	5	0 8	39 ⅄	34·68	186
	Bolton (Belmont) .....*old gauge*	R H Swindlehurst Esq CE	6	0 9	800	59·00	221
	,, (,,) ... *new gauge*	,, ,, ,,	5	1 0	800	58·71	...
D	Southport (Birkdale).....	J. Baxendell, Esq.....	5	1 0	29 T	33·38	186
D†	Rochdale (Nayden Filters)	J. Diggle, Esq., C.E....	5	1 8	761 ⅄	47·37	205
†	,, (,, Dean)...*old g.*	,, ,, ,,	5	1 7	948 ⅄	37·08	...
†	,, (,, ,,)	,, ,, ,,	5	1 3	948 ⅄	44·19	...
D†	,, (Spring Mill, Whitworth)	W. Tomlinson, Esq. ...	8	1 7	720	53·18	193
D†	,, (Cowm, ,,)	,, ,, ,, ...	8	1 7	760	54·65	187

DIVISION VIII.—NORTH WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft in.	feet.	inches.	
LANCASHIRE—(*con.*)						
D† Rochdale (Facit)	T. S. Smithson, Esq....	5	0 6	855 T	55·73	209
Southport (Hesketh Park).....M	J. Baxendell, Esq. ...	5	1 0	22 ⅄	32·08	...
D ,, (,, ,,)*M.O.g.*	,, ,, ,, ...	8	1 0	22	31·88	183
,, (Lord Street Station).	Gt. Central R. Co.	9	3 6	21 ⅄	30·36	175
D ,, (Park Crescent)	J. Watkins, Esq.	5	1 0	30 T	34·03	188
Entwistle .....*old gauge*	RH Swindlehurst Esq CE	7	1 0	700	53·60	198
,, ...*new gauge*	,, ,, ,,	5	1 0	700	52·68	...
Blackstone Edge (Hollingworth)	Rochdale Canal Compy‡	10	1 5	650	40·30	...
† ,, ,, (Windy Bank)	,, ,, ,, ...	10	1 6	600	42·10	...
† ,, ,, ...	,, ,, ,, ...	10	1 9	1225	41·20	...
† ,, ,, (Canal Summit)	,, ,, ,, ...	10	1 10	700	35·30	...
† ,, ,, (Chelbourn) ...	,, ,, ,, ...	10	1 3	800	41·20	...
,, ,, (Lenches)	,, ,, ,, ...	10	1 10	800	46·70	...
† ,, ,, (Calf Lee).....	,, ,, ,, ...	10	1 6	960	37·70	...
Chorley (Crooke Hall)	Carlton Cross, Esq. ...	5	2 6	265 T	41·34	170
D† Todmorden W W. (Ramsden Moor)	J. Radcliffe, Esq.	5	1 0	1326 ⅄	53·76	236
D† ,, ,, (,, Res.)	,, ,, ,, ...	8	1 0	980 ⅄	54·95	235
Haslingden (Holden Wood).....	R. B. Rigby, Esq.....	8	1 0	670	55·05	187
,, (Calf Hey).....	,, ,, ,, ...	8	1 0	800	53·49	187
D ,, ...	Dr. Harrison	5	1 9	750	52·44	157
D ,, Vicarage.....	Rev. A. Spencer.....	8	1 6	800 T	48·10	204
,, (Mitchells House) ...	C. Harrison, Esq.	9	1 6	990	44·99	175
D Over Darwen (Sunnyhurst Hey.)	R. W. S. Saville, Esq..	8	1 8	915 T	52·05	192
,, ,, (Earnsdale Res.)..	,, ,, ,,	8	1 8	705 T	55·94	193
,, ,, ...	F. G. Haworth, Esq....	8	1 8	705	54·11	193
D ,, ,, (St. James's Vic.) .	Rev. W. H. Blamire...	5	1 0	564 ⅄	52·59	200
,, ,, (Hoddlesden) No.1	W. Stubbs, Esq., C.E..	8	4 0	680	57·42	179
,, ,, (,,) No.2	,, ,, ,, ...	8	1 0	675	56·14	179
,, ,, (Daisy Green) No.1	,, ,, ,, ...	8	1 0	969	53·43	191
,, ,, (,, ,,) No.2	,, ,, ,, ...	8	1 0	969	54·29	191
,, ,, (Pickup Bank) No.1	,, ,, ,, ...	8	1 0	720	54·49	191
,, ,, (,, ,,) No.2	,, ,, ,, ...	8	1 0	720	54·84	190
D Todmorden (Scaitcliffe).....	W. Ormerod, Esq.....	8	1 0	468 T	54·63	209
Blackburn (Guide Reservoir) ...	W. Stubbs, Esq., C.E..	8	1 0	650	43·44	195
,, (Witton)	,, ,, ,,	8	2 6	315 ⅄	45·42	186
,, (Store Yard)	,, ,, ,,	8	30 0	373 ⅄	36·34	163
,, (Waterworks Office).	,, ,, ,,	8	60 0	436	35·98	164
,, (Pumping Station) ...	,, ,, ,,	8	6 0	600 ⅄	42·27	148
,, (Samlesbury)..... M	,, ,, ,,	8	...	240	38·35	...
D Accrington (Milnshaw Grounds).	Mr. Carr.....	5	1 6	464 ⅄	36·31	185
D Preston (Corporation Offices) ...	H. Reah, Esq., C.E. ...	8	18 0	148	35·74	143
†Rawtenstall (Cloughbottom Res.)	R. B. Rigby, Esq.....	8	1 0	1025	49·58	193
† ,, (Clough Bridge Res.)	,, ,, ,, ...	8	1 0	900 ⅄	44·92	221
Burnley Waterworks †Causeway Side	W. Williamson, Esq.	8	2 0	1116	42·96	...
Burnley Waterworks †Sheddin	,, ,, ,,	8	2 0	960	43·42	...
Burnley Waterworks †Cant Clough, S. Side	,, ,, ,,	8	2 0	900	44·92	211
Burnley Waterworks † ,, ,, N. Side	,, ,, ,,	8	2 0	900	42·63	211
Burnley Waterworks †Rams Clough Head	,, ,, ,,	8	2 0	1260	47·90	...

‡ Returns supplied by C. R. Dykes, Esq.

DIVISION VIII.—NORTH WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
LANCASHIRE—(*con.*)						
Rishton Reservoir	Leeds & L'pool Canal Co.	...	...	467	36·34	...
D Huncoat (Burnley Road Res.)	C. Harrison, Esq.	9	1 6	620 ⅄	42·64	181
†Burnley (Yorkshire Street)	W. Williamson, Esq.	8	30 0	420 ⅄	46·11	201
† ,, (Swinden, Upper)	,, ,, ,,	8	12 0	820 ⅄	48·35	214
† ,, (,, Lower)	,, ,, ,,	8	2 0	745 ⅄	47·33	214
† ,, (Extwistle Moor)	,, ,, ,,	8	2 0	1310 T	49·67	...
D ,, (Gawthorpe Hall)	A. Ford, Esq.	8	1 3	316 T	42·27	190
D Preston (Haighton)	J. J. Myres, Esq., C.E.	5	1 2	255 ⅄	38·83	183
Alston	H. Reah, Esq., C.E.	8	1 2	320 ⅄	43·90	...
Kirkham (Weeton)	C. Arthur, Esq.	10	1 0	95 T	39·38	...
D Blackpool Hospital	Dr. Anderson	5	1 0	59 ⅄	35·76	190
Nelson (Coldwell Reservoir)	C. E. Newton, Esq., C.E.	8	2 0	950	30·07	...
Worthdale (Watersheddles)	W H Hopkinson, Esq. C.E	5	1 0	1115 T	49·83	...
D Eccleston (Elswick Lodge) *old g.*	S. King, Esq.	5	1 4	52 T	35·50	185
,, (,, ,,) Field	,, ,, ,,	5	1 0	52 T	40·65	...
,, (,, ,,) ,,	,, ,, ,,	5	6 0	56 T	38·26	...
Stonyhurst College	Rev. W. Sidgreaves	11	1 0	376 ⅄	51·62	209
D ,, ,,	,, ,, ,,	11	2 0	377 ⅄	51·29	209
,, ,, M	,, ,, ,,	11	1 0	376 ⅄	50·18	...
Preston W. Works. Knowle Green M	H. Reah, Esq., C.E.	8	1 2	400 T	40·22	...
Preston W. Works. Loud-scales M	,, ,,	8	1 2	400 T	44·33	...
Preston W. Works. Spade Mill M	,, ,,	8	1 2	400 T	43·90	...
Preston W. Works. Jeffrey Hill M	,, ,,	8	1 2	900 T	48·93	...
D St. Michael's-on-Wyre Vic. No. 3	Rev. P. J. Hornby	5	1 0	26 ⅄	38·90	198
D Beaton Fell (Barnsfold Res.)	J. J. Myres, Esq., C.E.	5	1 6	506 ⅄	38·98	196
,, (,, ,,) M	,, ,, ,,	5	1 6	506 ⅄	38·88	...
Barrowford Reservoir	Leeds & L'pool Canal Co.	8	1 0	473	49·90	...
Foulridge (Canal Office)	,, ,, ,,	8	1 0	497	47·78	...
,, (Cragg Nook Hill)	,, ,, ,,	8	1 0	690	43·53	...
,, (Upper Reservoir)	,, ,, ,,	8	1 0	582	45·09	...
D Garstang (Bruna Croft)	Sydney Wilson	5	0 6	71 ⅄	38·62	196
Clitheroe (Downham Hall)	R. Assheton, Esq.	10	1 6	464 ⅄	47·00	...
Chatburn (Middlewood)	W. K. Wilkinson, Esq.	5	1 3	363 T	48·25	156
Garstang (Barnacre Reservoir)	C. Arthur, Esq.	10	1 0	617 ⅄	48·44	...
,, (Grizedale Reservoir)	,, ,, ,,	10	1 0	519 T	47·72	..
,, (,, Stake House)	,, ,, ,,	...	...	775	49·66	...
D ,, (Forton)	W. G. Welch, Esq.	5	2 0	130 T	39·67	196
Wyresdale (Abbeystead)	J. Cook, Esq., C.E.	8	1 0	366 T	43·10	170
Quernmore (Old Gauge Basin) M	,, ,, ,,	8	1 0	963 T	45·85	...
Wyresdale (Wardstone) M	,, ,, ,,	8	1 0	1440 T	68·67	...
Quernmore (Brow Top)	,, ,, ,,	8	1 0	552 T	44·33	171
Heysham House	Miss Tomlinson	5	1 6	80	47·86	150
D ,, Hall	Mrs. Grafton	5	1 0	96	40·84	198
Lancaster (Marton Street Yard)	J. Cook, Esq., C.E.	8	1 9	70 ⅄	38·87	195
D ,, (Greg Observatory)	Dr. Schloesser	8	1 0	312	41·14	197
,, (Escowbeck, Caton)	A. Greg, Esq.	10	3 0	150 T	41·75	183
,, (Caton)	Rev. W. J. Locke	5	1 0	103 T	42·36	...
Morecambe	Mr. T. B. Lamb	...	1 0	24 T	36·79	177

DIVISION VIII.—NORTH WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1897	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
LANCASHIRE—(*con.*)						
D Wray Vicarage	Rev. C. L. Reynolds...	5	1 0	165 T	46·73	196
Melling (Hornby Castle)	Col. Foster	8	1 8	100	45·18	168
Barrow-in-Furness	W. Fergusson, Esq. ...	11	1 6	36 ⅄	42·14	183
Arkholme (Storrs Hall)	F. F. Pearson, Esq. ...	5	1 0	220	49·43	...
D Ulverston (Urswick)	Rev. R. B. Billinge ...	5	1 0	...	51·11	212
D Lindal (Berkune Mines)	J. Hodgson, Esq.	5	9 0	215	48·63	193
†Cartmel (Holker)	Mr. W. Fox	8	4 8	155 ⅄	45·51	182
D Grange-over-Sands (Belmont)...	Dr. W. M. Burman ...	5	1 0	180 T	46·57	202
D†Ulverston (Poaka Beck)	W. Fergusson, Esq. ...	11	1 6	512 ⅄	56·28	236
D Cartmel (Pit Farm)	Mr. W. R. Nash	5	1 0	122 T	47·66	199
,, (Broughton Hall)	Col. Ainsworth	5	2 8	210 ⅄	54·74	212
D Colton	Rev. A. Christopherson	5	1 0	226 ⅄	63·27	201
,, ...M	,, ,, ,,	8	1 0	226 ⅄	63·19	...
Finsthwaite Vicarage	Rev. S. Inman	8	1 2	250	63·75	192
D Broughton-in-Furness	late Rev. F.A. Malleson	5	1 3	40	62·80	197
D Blawith	Rev. J. Ashburner.....	5	0 10	185 T	64·72	200
D Cartmel Fell Vicarage	Rev. W. Summers.....	5	0 8	220 T	65·70	207
D Hawkshead (Esthwaite Lodge)..	Major Alcock-Beck ...	5	3 6	232 T	75·01	221
,, (,, StricklandEase)	,, ,, ,, ...	5	3 6	254 T	66·00	...
D†Duddon Valley (Seathwaite Vic.)	Rev. S. R. M. Walker	5	1 0	330 T	91·61	227
D†Monk Coniston Park	Mr. Wray	5	1 2	305 T	101·58	210
Hawkshead (Black Fell) .....M	S. A. Marshall, Esq....	5	1 6	1055 T	71·80	...
D Skelwith Fold [Ambleside]	,, ,, ,, ...	5	1 0	333	93·47	240
,, ,, [,,] ...M	,, ,, ,, ...	5	1 0	333	93·26	...

DIVISION IX.—YORKSHIRE.

WEST RIDING.						
†Sheffield (Brincliffe Rise)	A. W. Chadburn, Esq.	5	1 0	500 T	32·59	184
† ,, (,, Edge)	Gt. Central R. Co.	9	3 6	336 T	28·97	178
† ,, (Redmires Res.)..	E. M. Eaton, Esq., C.E.	10	5 0	1110 ⅄	37·57	204
,, (,, ,,) *weekly*	,, ,, ...	8	4 0	1110 ⅄	37·24	...
D ,, (Tylecote, Ranmoor) ...	J. Dixon, Esq.	5	1 0	610 ⅄	31·85	190
,, (Rivelin)	E. M. Eaton, Esq., C.E.	10	4 0	564 ⅄	34·27	193
,, (,,) ..... *weekly*	,, ,, ,, ...	8	4 0	564 ⅄	34·14	...
† ,, (Crookes)	,, ,, ,, ...	10	2 0	629 ⅄	28·08	196
† ,, (,,) ..... *weekly*	,, ,, ,, ...	8	2 0	629 ⅄	28·15	...
D ,, (Weston Park)	E. Howarth, Esq.	8	1 0	430 ⅄	29·24	178
† ,, (Victoria Station)	Gt. Central R. Co.....	9	3 6	188 T	22·76	165
,, (Tinsley Locks)	,, ,, ,, ...	9	...	117 T	23·72	186
D Tickhill (Sandbeck Park)...	Mr. G. Summers.....	8	1 0	150 T	23·13	166
†Rotherham (Moorgate Grove) ...	C. E. Chrimes, Esq. ...	5	1 0	262 ⅄	22·78	154
,, (Thrybergh)	W.H.R.CrabtreeEsqCE	8	1 0	184 ⅄	21·50	177
D Tickhill	G. G. Phillips, Esq. ...	8	1 0	61 ⅄	21·21	163
D Sheffield (Chapeltown)	Mr. D. Bell.....	8	5 0	582 L	26·69	184
Doncaster (Firsby)	W.H.R.CrabtreeEsqCE	8	1 3	189 ⅄	26 42	178
D ,, (Wadworth Hall).....	Rev. J. C. Ross	8	1 0	190 ⅄	24·80	198

DIVISION IX.—YORKSHIRE—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
WEST RIDING—(*con.*)						
D Bolsterstone (Waldershaigh) ...	C. M. Wilson, Esq.....	8	3 1	950 T	33·75	213
D Wentworth Woodhouse	Mr. J. Hughes	5	0 6	360	25·37	184
Wortley	Gt. Central R. Co.....	9	3 6	548 T	27·04	170
Elsecar	,, ,, ,, ...	9	3 6	181 T	21·35	116
†Langsett Moor (Pike Lowe).....	J. H. Taylor, Esq.,C.E.	5	1 0	1358 T	51·60	...
† ,, ,, (Ewden Height).	,, ,, ,,	5	1 0	1099 T	48·30	...
† ,, ,, (Range Moor) ...	,, ,, ,,	5	1 0	1040 T	54·28	...
D† ,, ,, (Upper Midhope)	,, ,, ,,	5	1 0	912 T	46·12	203
D Hoyland (King Street).....	J. W. Wilson, Esq. ...	5	1 0	330	24·47	152
D Wath-upon-Dearne (Chapel St.)	Dr. Burman	8	1 0	185 ⊼	22·95	176
Worsborough	Gt. Central R. Co.....	9	3 6	225 T	23·60	150
D Stainborough(Wentworth Castle)	W. Fisher, Esq.....	8	2 6	520 T	25·06	167
Doncaster	Gt. Central R. Co.....	9	3 6	32 T	21·40	174
,, (Pumping Station) ...	WHR.Crabtree,Esq CE	8	1 2	30 ⊼	24·25	152
D ,, (Magdalens)	Mr. C. Parkin	5	4 9	46 T	23·35	158
DunfordBrdg.(Up.Windleden)M	H. Dearden, Esq., C.E.	12	2 2	1100	51·41	...
† ,, ,, (Dearden Res.) M	,, ,, ,, ...	12	1 6	1244 T	52·05	...
† ,, ,, Station	Gt. Central R. Co.....	9	3 6	954 T	49·66	179
D† ,, ,, Reservoir	H. Dearden, Esq., C.E.	12	2 0	1111 T	50·89	207
Greenfield (Chew Mount)	G. H. Hill, Esq., C.E..	7	0 7	...	50·30	...
,, (Yeoman Hey).....	,, ,, ,, ...	7	0 7	759	50·70	...
†Penistone (Carlcotes).....	Gt. Central R. Co.....	9	4 0	1075 T	47·14	196
† ,, ...	,, ,, ,, ...	9	3 6	717 T	32·45	183
† ,, (Hazlehead)	,, ,, ,, ...	9	3 9	868 T	42·72	170
D† ,, (Ingbirchworth Res.)..	J. H. Taylor, Esq. C.E.	8	1 3	853 ⊼	37·37	194
D Holmbridge (Yateholme)	O. J. Kirby, Esq., C.E.	7	1 0	861 ⊼	58·90	179
† ,, (Holme Styes)	Mr. L. Hinchliffe	7	2 0	830 T	51·70	...
† ,, (Boshaw Whams) ...	,, ,, ,, ...	7	2 6	930 T	52·20	...
† ,, (Bilberry Reservoir)..	,, ,, ,, ..	7	2 6	820 T	61·70	...
D Barnsley (Church Street)	Dr. Sadler	5	5 2	355 ⊼	25·19	192
,, (Beckett Square)	J. H. Taylor, Esq., C.E.	8	4 0	306 ⊼	24·36	156
,, ...	Gt. Central R. Co.....	9	3 6	317 T	20·91	130
†Saddleworth Station ..... M	L. K. Jones, Esq.....	5	4 2	630 T	41·94	...
Barnsley (Cawthorne)	Rev C. T. Pratt.....	5	1 6	340 ⊼	28·37	164
Strinesdale [Oldham]	G. H. Hill, Esq., C.E..	5	4 0	815	33·83	...
†Meltham (Harden Moss)	J. W. Schofield, Esq....	8	1 2	1212 T	48·12	...
,, (,, ,,) *new g.*	,, ,, ,, ...	8	1 0	1212 T	48·59	...
Wessenden Head	,, ,, ,, ...	8	1 0	1270 T	42·90	...
,, (Hollin Bank Moss) ..	,, ,, ,, ...	8	1 0	1360 T	34·46	...
,, (Great Butterley) ...	,, ,, ,, ...	8	1 0	1110 T	39·31	...
,, (Bobus).....	,, ,, ,, ...	8	1 0	1200 T	42·43	...
Standedge (Castleshaw).....	C. J. Batley, Esq., C.E.	8	4 6	876 ⊼	41·91	187
,, (Redbrook Res.) *old g.*	L. K. Jones, Esq.	8	1 8	1150	44·36	...
,, (,, ,,)*new g.*	,, ,, ,, ...	8	1 6	1150	43·77	...
†Meltham (Brow Grains)	J. W. Schofield, Esq....	8	1 0	900 T	42·48	...
Denshaw (Ox Hey)	G. H. Hill, Esq., C.E..	5	4 6	1030	43·07	...
,, (New Year's Bridge)...	C. J. Batley, Esq , C.E.	5	4 0	1012 ⊼	46·19	187
,, (Ready Con Dean).....	G. H. Hill, Esq., C.E...	5	4 6	1414	38·17	...

DIVISION IX.—YORKSHIRE—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground.	Height Above SeaLevel	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WEST RIDING—(*con.*)						
Meltham (Royd Edge)	C. L. Brook, Esq.	8	1 0	585 T	51·03	...
D ,, (HarewoodLodge)*new g*	,, ,, ,,	8	1 0	514 L	45·09	214
† ,, Grange	J. W. Schofield, Esq.	8	1 2	850 T	39·75	...
†Marsden (Deer Hill)	,, ,, ,,	8	1 0	1149 T	40·88	...
,, (,,) *new g.*	,, ,, ,,	8	1 0	1149 T	43·38	...
D Doncaster (Kirk Bramwith)	H.A.Brundell,Esq.C.E.	5	1 0	17 ⅄	22·48	183
D†Slaithwaite (Blackmoorfoot)	J. W. Schofield, Esq.	8	1 0	800 T	44·01	231
Honley (Northgate House)	W. Brooke, Esq.	5	1 0	350 T	35·49	...
Hemsworth Hall	F. G. Leatham, Esq.	6	2 6	250	23·46	...
D Wakefield (Walton)	E. Simpson, Esq.	5	1 0	140 T	20·99	137
Huddersfield (BankField,Golcar)	J. E. Ramsden, Esq.	5	1 0	400 T	39·49	195
D ,, (Cemetery)	Mr. J. Firth	8	4 0	400	33·02	185
D† ,, (Dalton)	J. W. Robson, Esq.	12	1 0	350 ⅄	40·97	197
Longwood (Bilberry Edge)	J. W. Schofield, Esq.	8	1 0	1090 T	34·16	...
D Ackworth (Nostell Priory)	Mr. J. Easter	5	4 0	...	24·88	142
D Mirfield (Cote Wall)	F M T JonesBalme,Esq.	8	0 9	200	27·61	178
D†Wakefield Prison	Mr. A. Clyde	8	1 0	96 ⅄	24·95	143
D ,, (Field Head)	C. C. Smith, Esq.	8	1 6	250 T	23·69	143
D ,, (Stanley Grange)	F. E. Haworth, Esq.	5	1 0	235 T	23·96	172
D Goole (Swinfleet)	Mr. G. Harrison	5	5 6	...	26·03	140
D ,,	W. E. Grayburn, Esq.	5	1 0	18 T	21·60	180
Rastrick	Messrs. J.T.Clay & Sons	5	20 0	380	29·52	147
D Batley (Staincliffe Reservoir)	O. J. Kirby, Esq., C.E.	7	1 0	492 ⅄	24·50	...
Sowerby Bridge (Haugh End)	J. S. Rawson, Esq.	5	0 8	450 T	42·72	202
Halifax (Bents, Norland) M	,, ,,	5	0 8	800 T	36·48	...
D ,, (BermersideObservatory)	J. Gledhill, Esq.	8	0 6	500	34·04	203
D ,, (Hall Ings, S. Owram)	Rev. G. E. Aspinall	5	0 7	750 T	32·97	192
,, (Thorpe) M	J. S. Rawson, Esq.	8	0 8	345 T	43·56	...
,, (,,)	,, ,,	5	0 8	345 T	43·95	...
D ,, (Public Library)	J. Whiteley, Esq.	8	1 0	625 T	32·89	194
† ,, (Albert)	J. A. Paskin, Esq., C.E.	5	1 0	795 T	32·94	...
† ,, (Gibbet)	,, ,, ,,	5	6 0	568 T	34·27	...
† ,, (Ramsden Wood)	,, ,, ,,	8	1 2	816 T	35·63	...
D Mytholmroyd (Ewood Hall)	Mrs. Riley	8	4 5	500 T	39·34	192
Hebden Bridge (Falling Royd)	A. R Crossley, Esq.	4	1 0	479 ⅄	45·85	201
,, ,, (Summerfield)	J. Hoyle, Esq.	5	0 8	875 ⅄	43·05	210
Halifax (Castle Carr)	J. A. Paskin, Esq., C.E.	...	...	1060 T	39·65	...
† ,, (Midgley Moor) M	,, ,, ,,	7	0 6	1350 T	48·70	...
† ,, (Warley Moor) M	,, ,, ,,	7	0 6	1425 T	43·18	...
† ,, (Ogden) M	,, ,, ,,	8	1 3	990 T	44·44	...
,, (Widdop)	,, ,, ,,	...	...	1050	48·47	...
† ,, (Walshaw Dean) M	,, ,, ,,	8	0 3	1380 T	47·26	...
D South Milford Rectory	Rev. F. J. Young	5	1 2	70 ⅄	25·08	194
Bradford (Queensbury)	R J. Foster, Esq.	8	2 2	1050	38·98	146
,, (Bowling Dyeworks)	H. Ripley, Esq.	8	1 0	490 T	30·81	177
,, (Brayshaw Reservoir)	J. Watson, Esq., C.E.	5	1 0	982 ⅄	36·74	193
D ,, (The Exchange)	H.A.Johnson,Esq.,C.E.	8	65 6	395 ⅄	32·35	185
D ,, (Allerton Road)	J. Clayton, Esq.	5	1 0	522 T	36·17	195

DIVISION IX.—YORKSHIRE.—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground		Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft.	in.	feet.	inches.	
	WEST RIDING—(*con.*)							
	Bradford (Thornton Moor)	J. Watson, Esq., C.E..	5	1	0	1218 ⊼	44·09	252
	,, (Stubden) *old gauge* ...	,, ,, ,, ..	8	1	0	1075 ⊼	50·01	236
	,, (,,)	,, ,, ,, ...	5	1	0	1071 ⊼	41·96	236
	,, (Nan Scar, Oxenhope) M	,, ,, ,, ...	5	1	0	1101 ⊼	51·75	...
	,, (Stairs Top) ..... M	,, ,, ,, ...	5	1	0	1401 ⊼	49 64	...
	,, (Leeming Reservoir) M	,, ,, ,, ...	5	1	0	850 ⊼	45·35	...
	,, (Doe Park) *old gauge* ..	,, ,, ,, ...	8	1	0	810 ⊼	50·48	218
	,, (,, ,,)	,, ,, ,, ...	5	1	0	811 ⊼	44·99	218
	,, (Manningham)	J. McLandsborough, Esq	5	6	6	428 ⊼	32·82	...
	,, (,, Lodge)..	J. Priestman, Esq.....	5	1	0	507	33·83	181
	,, (Leeshaw Res.) ..... M	J. Watson, Esq., C.E..	5	1	0	875 ⊼	50·18	...
	,, (Chellow Dean)	,, ,, ,, ...	5	1	0	645 ⊼	38·86	218
	,, (Hewenden Res.). *old g.*	,, ,, ,, ...	5	1	0	700 T	43·90	216
	,, (,, ,,)	,, ,, ,, ...	5	1	0	701 ⊼	40·01	216
	,, (Heaton Res.) ...*old g.*	,, ,, ,, ...	8	1	0	530 ⊼	34·17	194
	,, (,, ,,)	,, ,, ,, ...	5	1	0	531 ⊼	31·68	194
	Leeds (Wortley Res.)	T. Hewson, Esq., C.E..	8	0	9	307 ⊼	28·67	180
	,, (Knostrop)	,, ,, ,,	8	0	9	72 T	27·25	165
D	,, (Holbeck)	Messrs. J. Rhodes & Co.	10	32	0	127 ⊼	24·04	126
D	,, (,, W. Works Depot)	T. Hewson, Esq., C.E..	8	0	9	93 ⊼	27·65	179
D	,, (Museum).....	H. Crowther, Esq.....	10	46	0	177	25·49	177
	,, (Woodhouse Moor).....	T. Hewson, Esq., C.E.	8	0	9	307 ⊼	26·41	181
D	,, (,, Cliff)	R. Reynolds, Esq.....	5	1	0	330	25·78	195
D	,, (Elmet Hall, Roundhay)..	J. H. Kitson. Esq.....	5	1	6	400 T	28·11	181
	,, (Weetwood Reservoir) ...	T. Hewson, Esq., C.E.	8	0	9	328 ⊼	25·47	176
	,, (,, Lodge).....	J. P. Reay, Esq.	5	0	9	400 T	24·73	168
D	,, (Allerton Hill)	T. Fenwick, Esq., C.E.	5	0	7	418 ⊼	26·37	190
D	,, (Oliver Hill, Horsforth)...	C. France, Esq.	3	1	0	250 T	39·29	196
	Shipley (Crag End)	Leeds & L'pool Canal Co.	8	1	0	304	32·36	...
	,, (Moor Head).....	Mrs. Knowles...	8	10	0	500	28·81	147
D	Oakworth (Oldfield)	W H Hopkinson, Esq. C E	5	1	0	1008 ⊼	45·59	169
	Bingley (Gilstead Filters)	J. Watson, Esq., C.E..	5	1	0	572 ⊼	26·36	185
	Keighley (Mornington Terrace)..	*News-cutting*	8	1	0	400	36·87	211
D	,, (The Knowle)	W. Clough, Esq.	5	1	0	395 T	38·84	194
D	Adel (Lawns Wood)	Mr. C. S. Irvine.....	5	1	0	475 T	29·19	181
	,, (Eccup South)	T. Hewson, Esq., C.E..	8	0	9	390 T	29·01	190
	,, (,, East).....	,, ,, ,, ...	8	0	9	375 ⊼	26·50	167
†	Bingley (Sunnydale).....	J. Watson, Esq., C.E..	5	1	0	975 T	34·54	202
	Harewood House	Countess of Harewood.	...	...		300	28·85	159
	,, (Arthington)	T. Hewson, Esq., C.E.	8	0	9	139 ⊼	30·42	180
	Skipton (Gill Grange, Silsden) M	J. Watson, Esq., C.E.	5	1	0	883 T	32·35	...
	,, (Bolton Road, ,,)...	Mr. D. Elder	5	1	0	370 T	29·45	167
	Ben Rhydding (Dunluce).....	H. A. Hering, Esq. ...	5	1	0	329 ⊼	35 06	...
D	Ilkley	G. W. Worfolk, Esq...	5	20	0	331 L	35·14	176
D	,, (Eaton Road)	A. Wilson, Esq.....	5	0	6	360 T	36·42	215
†	,, (Cherry Bank)	Mr. T. Robinson.....	8	1	3	600	35·34	135
	Skipton (Silsden Reservoir)	J. Watson, Esq., C.E..	5	1	0	560 ⊼	32·89	180
	Pannal (Kirkby Overblow)	A. Rowntree, Esq.....	4	0	9	350 T	26·87	189

DIVISION IX.—YORKSHIRE—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
	WEST RIDING—(*con.*)							
	Leathley (Lindley Wood S)	T. Hewson, Esq., C.E.	8	0	9	312 T	33·06	212
	,, (,, ,, N)	,, ,, ,,	8	0	9	320 T	33·34	212
	Slaidburn (Hareden Brook) M	H. Reah, Esq., C.E.	8	1	2	540	80·55	...
	,, (Langden Brook) M	,, ,,	8	1	2	556	79·80	...
	,, (Whiteholme)	W. K. Wilkinson, Esq.	5	1	3	475 T	59·18	182
	Skipton (Cringle's Reservoir)	J. Watson, Esq., C.E.	5	1	0	760 T	33·30	177
	,, (Chelker Reservoir) M	,, ,, ,,	5	1	0	730 ⊼	33·58	...
	,, (Marton House)	W. Farrer, Esq.	5	0	10	568	43·65	201
†	,, (*Craven Herald* Office)	E. Townsend, Esq.	8	2	0	360	36·44	190
	,, (Hawthorne Cottage)	Leeds & L'pool Canal Co.	8	1	0	380	36·50	...
	Gargrave (Banks Hill Bank Newtn)	,, ,, ,,	8	1	0	545	37·99	...
	,, (Ray Bridge Hill)	,, ,, ,,	8	0	10	459	39·92	...
	,, (Great Scarnber Hill)	,, ,, ,,	8	0	9	676	44·43	...
	Slaidburn (Dunsop Houses)	W. Stubbs, Esq., C.E.	8	1	0	450 T	70·21	185
	,, (Middle Knoll) M	,, ,, ,,	8	2	6	1298 ⊼	61·30	...
	,, (Brennand)	,, ,, ,,	8	1	0	820 ⊼	73·64	190
	,, (Whitendale)	,, ,, ,,	8	1	0	830 ⊼	78·98	193
	,, (Cabin Hill) M	,, ,, ,,	8	3	1	1559 ⊼	68·00	...
	,, (Baxton Fell) M	,, ,, ,,	8	2	6	1540 ⊼	62·45	...
	Winterburn (Long Hill)	Leeds & L'pool Canal Co.	8	0	9	705	41·27	...
	,, (Brown Hill)	,, ,, ,,	8	1	0	961	47·64	...
	York (Mount Villas)	J. S. Rowntree, Esq.	5	1	0	70	24·63	209
D	,, (Burton Croft)	G. Crawhall, Esq.	5	1	0	45 T	25·06	190
D	,, (Cherry Hill)	Mrs. H. Richardson	5	1	6	40	23·90	197
	,, (Phil. Soc. Gardens)	The Meteor. Council	8	1	9	53 ⊼	24·35	185
	,, (,, ,, ,,)	,, ,, ,,	8	1	9	53 ⊼	24·47	194
D	,, (Bootham)	A. D. Naish, Esq.	5	0	10	50	25·40	170
	,, (The Retreat)	Dr. H. J. Mackenzie	5	1	0	74	23·82	179
	Bolton Abbey Estate Office	A. Downs, Esq.	5	1	2	350	37·24	190
	Goldsborough Hall	Mr. R. Goodall	5	1	0	...	27·95	167
	Nun Monkton	H. Horsfield, Esq.	5	1	0	45	23·64	171
	Fewston (Swinsty E)	T. Hewson, Esq., C.E.	8	0	9	460 T	34·93	214
	,, (,, W)	,, ,, ,,	8	0	9	425 T	34·68	214
	,, (Timble)	,, ,, ,,	8	0	9	720 T	33·39	226
	,, South	,, ,, ,,	8	0	9	525 T	35·36	230
	,, North	,, ,, ,,	8	0	9	525 T	32·89	230
	,, (Spinksburn)	,, ,, ,,	8	0	9	636 T	32·57	222
	Blubberhouses	,, ,, ,,	8	0	9	575 T	36·22	216
†	Harrogate (Ten Acre Reservoir)	Harrogate W.W.	8	2	9	620 T	32·20	...
†	,, (Beaver Dyke Res.)	,, ,,	8	0	11	575 T	32·60	...
†	,, (Harlow Hill)	G. Paul, Esq.	5	1	0	589	33·15	204
†	,, (Irongate)	Harrogate W.W.	8	2	6	455 T	28·34	...
D†	,, (The Stray)	Mr. Gledhill	5	1	0	380	27·74	208
D†	,, (Park Parade)	T. Lockwood, Esq.	5	1	0	400	28·31	208
	Barden Reservoir ..... *old g.*	J. Watson, Esq., C.E.	8	1	2	746 ⊼	43·74	233
	,, ,,	,, ,, ,,	5	1	0	746 ⊼	43·24	233
	West End	T. Hewson, Esq., C.E.	8	0	9	795 ⊼	38·31	217
	,, ,, (Rocking Hall)	,, ,, ,,	8	0	9	1225 T	44·47	230

DIVISION IX.—YORKSHIRE—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
WEST RIDING—(*con.*)							
West End (Thruscross)	T. Hewson, Esq., C.E..	8	0	9	900 T	37·14	227
Upper Barden Reservoir	J. Watson, Esq., C.E..	5	1	0	1250 ⅄	41·11	233
Burnsall (Thorpe Fell) .....M	,, ,, ,, ...	5	1	0	1661 ⅄	40·93	...
,, (Sandbed Beck) .....M	,, ,, ,, ...	5	1	0	676 ⅄	44·37	...
,, Rectory	Rev. W. J. Stavert ...	8	4	5	503 ⅄	46·61	216
Washburn Dale (Ray Bank) ...	T. Hewson, Esq., C.E..	8	0	9	1137 T	36·01	204
,, Head	,, ,, ,,	8	0	9	1275 T	41·09	199
†Knaresborough (Conyngh'm Hall)	Mr. G. Knight	5	1	3	200 T	26·27	141
D ,, (Farnham)	R. Elmhirst, Esq.	5	1	0	170 ⅄	24·79	200
D Ripley Castle	Mr. J. Tunnington.....	5	1	0	230 T	26·50	180
D Settle (The Terrace)	J. W. Shepherd, Esq..	8	1	2	525 ⅄	48·37	219
D†Pateley Bridge (Castle Stead) ...	Mr. C. May	5	1	0	410	41·32	214
Grimwith Reservoir .....*old g.*	J. Watson, Esq., C.E..	8	1	0	890 ⅄	45·49	223
,, ,, ...	,, ,, ,, ...	5	1	0	893 ⅄	45 66	223
,, (Trunla Hill) .....M	,, ,, ,, ...	5	1	0	1201 ⅄	40·44	...
D†Malham Tarn.....	Mr. Coulthard	5	1	0	1296 ⅄	62·73	223
D ,, ,, ...*new gauge*	,, ,, ...	8	1	0	1296 ⅄	62·17	223
D Austwick (Crow Nest)	J. Howson, Esq.....	8	1	0	570 T	46·29	205
Dallow Moor (High Skeldon) ...	T. Hewson, Esq., C.E..	8	0	9	719 ⅄	34·33	170
,, ,, (Harper Hill)	,, ,, ,, ...	8	0	9	859 ⅄	35·95	184
D†Ripon (The Red House)	F. D. Wise, Esq.	5	1	0	120	28·21	209
D ,, (W.W. Lumley Moor) ...	Mr. G. Craggs	8	0	6	572 T	38·02	216
†Ramsgill (Raygill House)	J. Watson, Esq., C.E..	5	1	0	925 T	37·47?	196
,, ...	,, ,, ,, ...	5	1	0	450 T	44·32	218
D†Arncliffe Vicarage	Rev. W. A. Shuffrey...	8	3	0	734 T	68·59	208
D ,, (Amerdale).....	J. Hammond, Esq. ...	8	1	6	734	65·37	225
†Nidderdale (High Riggs)	J. Watson, Esq., C.E..	5	1	0	1010 T	43·03	185
,, (East Gill Head)... M	,, ,, ,, ...	5	1	0	1710 ⅄	54·43	...
† ,, (Rain Stang) .....M	,, ,, ,, ...	5	1	0	1470 T	46·26	...
† ,, (Angram)	,, ,, ,, ...	5	1	0	1150 T	62·18	152
† ,, (New Houses)	,, ,, ,, ...	5	1	0	755 T	45·81	206
Kirkby Malzeard (Drovers' Inn)..	T. Hewson, Esq., C.E.	8	0	9	633 ⅄	32·60	196
,, ,, (Hawset)	,, ,, ,, ...	8	0	9	820 ⅄	36·26	212
,, ,, (Hambleton Hill)	,, ,, ,, ...	8	0	9	1106 ⅄	41·61	...
,, ,, (Bagwith Brae).	,, ,, ,, ...	8	0	9	697 ⅄	32·43	180
,, ,, (Stone & Ears Wham)	,, ,, ,, ...	8	0	9	1118 ⅄	37·82	...
D Ripon (High Bank, Mickley) ...	Miss Harrison	5	1	6	225 T	27·57	170
Masham Moor (Benjy Guide) ...	T. Hewson, Esq , C.E..	8	0	9	1412 ⅄	50·07	...
,, ,, (W Somerside)...	,, ,, ,, ...	8	0	9	960 ⅄	41·05	155
,, ,, (High Sour Mire)	,, ,, ,, ...	8	0	9	884 ⅄	36·39	171
,, ,, (Leighton)	,, ,, ,, ...	8	0	9	636 ⅄	32·08	174
,, ,, (Low Houses).....	,, ,, ,, ...	8	0	9	693 ⅄	37·50	194
D Oughtershaw Hall.....	Miss Woodd	8	1	6	1175 T	76·16	194
D†Sedbergh (Brig Flatts).....	J. Handley, Esq.	5	1	0	300 T	57·19	204
D ,, (Akay)	C. E. Taylor, Esq.....	5	1	0	400 T	59·53	197
D ,, (Cemetery).....	Mr. J. Anderson.....	5	1	0	374 ⅄	60·99	215
† ,, (Thorns Hall)	Miss Sedgwick	5	1	0	400 T	58·29	206

DIVISION IX.—YORKSHIRE—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
EAST RIDING.						
Patrington (Spurn Head)	The Meteor. Council	8	1 0	27	20·73	169
D ,,	W. B. Pugh, Esq.	5	2 6	46 ⊼	24·30	129
D Hedon (The Vicarage)	Rev. J. H. Richardson	5	1 0	...	24·14	167
D†Hull (Pearson Park)	E. A. Peak, Esq.	5	0 6	6	24·42	159
,, (Springhead)	F. J. Bancroft, Esq.	5	1 7	12 T	24·29	...
Cottingham	,, ,, ,,	5	1 1	25 T	24·71	...
D ,,	J. H. Hill, Esq.	8	1 3	26 T	25·13	175
D Beverley (East Riding Asylum)	Dr. Macleod	5	1 0	175 T	24·06	189
D ,, (Register House)	G. A. Thompson, Esq.	5	1 0	22	26·73	178
,, (New Walk)	W. Evans, Esq., C.E.	5	7 0	45	26·57	179
,, (Hull Bridge)	,, ,,	5	2 6	11 ⊼	24·67	171
D Cherry Burton	H. J. Hildyard, Esq.	8	0 8	...	27·30	184
D Market Weighton (Dalton Hall)	Mr. J. Allsop	8	1 4	150 T	27·62	168
D Hornsea (Elim Lodge)	T. B. Holmes, Esq.	8	1 3	30 B	25·62	179
Brandesburton (Hempholm)	W. Evans, Esq., C.E.	5	2 6	11 ⊼	23·82	188
Middleton-in-the-Wolds	Rev. H. D. Blanchard.	5	1 0	156	23·50	128
D Pocklington (Warter)	J. Coxon, Esq.	5	1 10	230 T	28·85	161
D Driffield (Beverley Road)	Rev. J. T. Harwood	8	8 0	68 T	24·53	182
,, (York Road) *Snowdon.*	W. E. Lovel, Esq.	5	1 0	76 T	27·96	188
D ,, (Highfield)	Mr. G.R. Merryweather	5	1 0	76	28·20	155
Wetwang	Rev. E. M. Cole	5	1 0	235 T	27·43	164
D Thixendale	Rev. W. H. Fox	10	0 10	425 T	31·95	200
D Lowthorpe (The Elms)	H. Onslow Piercy, Esq.	5	1 0	63 ⊼	26·76	188
D Ganton Hall [Scarborough]	Mr. Sherwood	5	1 0	200 T	28·67	128
Hunmanby (Holly Bank)	Miss Suter	5	1 2	...	27·33	...
NORTH RIDING.						
Easingwold (Marton Vicarage)	Rev. F. S. Newman	5	3 3	200 T	24·82	...
Terrington Hall	Mr. T. Suffield	5	1 5	300 T	26·49	198
Malton	E.K.Spiegelhalter, Esq.	5	1 0	51	26·55	186
†Old Malton	H. Hurtley, Esq.	10	1 0	75 T	24·32	...
D Hovingham (Wigganthorpe)	Mr. J. S. Upex	5	1 0	350 T	27·42	201
D Melmerby (Baldersby)	W. Gregson, Esq.	5	1 0	101 T	24·93	203
D Thirsk (Sowerby)	C. M. Swarbreck, Esq.	5	1 0	105 T	21·30	197
,, (,,)	A. C. Bamlett, Esq.	5	...	...	25·27	116
D Pickering (The Rectory)	Rev. G. H. Lightfoot	5	0 8	180	24·49	156
D Bedale (Thorpe Perrow)	Mr. W. Culverwell	5	1 6	170	22·85	150
†Hawes Junction	The Meteor. Council	8	1 0	1135	69·11	237
†Aysgarth Vicarage M	Rev. F. W. Stow	3	1 0	644 T	38·00	...
D ,, ,,	,, ,,	8	1 0	659 T	37·05	202
D†Leyburn (Bolton Hall)	Mr. F. Scrivener	8	1 0	420	30·71	173
D Seamer (Irton)	W.Millhouse,Esq. C.E.	8	1 0	94	29·13	163
D Scarborough (Osgodby)	,, ,,	8	1 0	166	24·76	128
D ,, (Observatory)	E. W. Ellerbeck, Esq.	8	1 0	220	25·20	164
D Boltby	A. C. Bamlett, Esq.	...	...	...	21·04	109
D Cloughton (Burneston)	Rev. J. T. Hartley	5	3 9	110 T	22·87	183
Hawes (South Lunds School)	Mr. Masheter	5	1 0	1100	64·05	...
D Northallerton (The Lodge)	W. Stead, Esq., C.E.	8	1 0	131 T	25·55	188

DIVISION IX.—YORKSHIRE—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height above Ground.	Rain Gauge. Height above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
NORTH RIDING—(*con.*)						
D Northallerton (Osmotherley).....	T. Yeoman, Esq.	8	0 8	650	23·47	228
Richmond (The Grove)	G. Roper, Esq.	5	1 3	430 T	26·11	136
Northallerton (Rounton Grange).	The Royal Meteor. Soc.	8	1 0	242	22·03	...
D Ingleby Manor	The Hon. P. Sidney.....	5	0 11	440 T	32·37	196
D ,, Greenhow Vicarage.....	Rev. J. Hawell	5	1 0	448 T	28·82	196
East Layton	Mrs. Proud	5	1 0	575 T	24·40	135
D Stanwick Park [Darlington]	Mr. W. Higgie	5	1 1	300 T	24·83	187
Forcett Park [,,]	Capt. Michell	5	1 0	360 T	24·28	178
Whitby (Royal Crescent)	T. Newbitt, Esq.	8	1 0	145 T	24·55	155
D ,, (Mulgrave Castle)	Mr. J. Corbett	5	1 0	410 T	27·28	207
Bowes	G. J. Symons, Esq F.R.S	8	1 0	950	26·00	...
Guisborough (Hutton Hall)	Sir J. W. Pease, Bt., M.P.	5	1 3	400 T	27·09	181
D ,, (Lockwood Beck Res)	W. I'Anson, Esq., C.E.	8	1 0	632 ⊼	28·68	182
,, (,, ,, ,,)M	,, ,, ,,	...	...	...	28·46	...
D Middlesborough (Ormesby)	Mr. W. Sanderson.....	5	1 0	90	23·84	202
,, (Albert Park)...	J. M. Parnaby, Esq. ...	8	2 0	30	25·26	185
D Barnard Castle (Hury Res.).....	D. D. Wilson, Esq. ...	8	1 0	866 T	38·70	227
D Mickleton	G. J. Symons, Esq. F.R.S	8	1 0	...	30·64	172
† ,, (Lime Kiln Pasture)M	,, ,, ,, ...	8	1 0	1175 T	32·30	...
† ,, (,, ,, ,,)M	,, ,, ,, ...	8	1 0	1175 T	33·15	...

DIVISION X.—NORTHERN COUNTIES.

DURHAM.						
D Darlington (Hurworth Grange)..	late J. E. Backhouse, Esq	5	1 0	161 ⊼	24·28	201
D ,, (Elcott, Hurworth)..	Rev. W. E. Stewart ...	5	1 0	121 T	23·96	188
D ,, (South End)	Mr. N. Black	8	0 10	140	23·80	201
D† ,, (Cleveland Parade)..	S. Hare, Esq.....	5	1 0	160 T	24·32	185
D ,, (Langholme Crescent)	J. H. Simpson, Esq. ...	5	1 6	165 T	24·39	186
,, (Hummersknott) ...	Mr. J. Short	5	1 0	...	27·07	149
D Barnard Castle (County School)..	E. Wells, Esq	5	1 6	540 ⊼	26·50	183
Stockton (Rimswell)	W. Anderson, Esq., C.E.	5	1 0	150 T	22·39	184
D Bishop Auckland (Mt. Pleasant)	E. Lingford, Esq.	6	3 0	375 ⊼	22·22	157
,, ,, (The Castle)...	Mr. E. Ford	5	1 0	300	24·03	205
D Witton-le-Wear (Witton Tower)	W. R. I. Hopkins, Esq.	5	0 8	420 T	25·24	149
West Hartlepool (Lynn Street)..	Mr. H. Lamb.....	5	63 0	84	16·41	170
Hartlepool (Heugh Lighthouse)..	W. Belk, Esq., C.E. ...	5	0 6	34 ⊼	21·06	177
D ,, (Hurworth Burn) ...	T. Fenwick, Esq., C.E.	5	0 7	360	23·57	126
D ,, (Hart Reservoir).....	,, ,, ,,	8	0 9	164	21·18	171
D† Wolsingham	Mr. A. Mitchell	5	1 0	464 ⊼	30·81	207
Eastgate (All Saints' Vicarage)..	Rev. G. B. Knight.....	5	0 9	768	35·39	218
D Tow Law.....	Rev. T. E. Espin	5	1 0	990	27·94	176
Durham Observatory.....	The Meteor. Council ...	12	4 0	340	21·81	186
D Ushaw College	Rev. J. Corbishley.....	5	0 9	600 ⊼	24·89	190
D Weardale W.W. (Tunstall) ...	R. Askwith, Esq., C.E.	8	1 2	724 ⊼	31·17	169
† ,, ,, (Waskerley 6)	,, ,, ,, ...	8	4 2	1229 ⊼	30·99	...

DIVISION X.—NORTHERN COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground. ft	in.	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
						feet.	inches.	
	DURHAM—(*con.*)							
	Weardale W.W. (Waskerley 3)	R. Askwith, Esq., C.E.	8	4	6	1433 ⊼	31·23	...
†	,, ,, (,, 4)	,, ,, ,, ...	8	4	7	1321 ⊼	31·30	...
†	,, ,, (,, 5)	,, ,, ,, ...	8	4	2	1244 ⊼	31·17	...
D	,, ,, (,,)	,, ,, ,, ...	8	0	11	1179 ⊼	30·83	130
†	,, ,, (,, 2)	,, ,, ,, ...	8	4	5	1367 ⊼	30·86	...
†	,, ,, (,, 1)	,, ,, ,, ...	8	4	4	1317 ⊼	30·82	154
D	Consett W.W. (Smiddy Shaw)..	,, ,, ,, ...	8	1	3	1128 ⊼	30·49	212
D	Seaham Harbour	Mr. G. H. Aird	8	1	6	141	23·00	201
	,, Vicarage	Rev. A. Bethune	5	0	6	80 T	23·29	...
D	,, Hall	Mr. R. Draper	5	1	0	106 ⊼	23·43	135
	Houghton-le-Spring (Myre Hall)	D. Balfour, Esq., C.E	5	1	0	261 T	22·62	...
D	Sunderland(W.HendonHo) No. 5	T. W. Backhouse, Esq.	5	1	0	130 ⊼	22·72	178
	,, (,, ,, ,,) No. 6	,, ,, ,,	5	1	0	130 ⊼	22·95	...
D	,, (Fever Hospital)	H. Scurfield, Esq., M.D.	5	1	0	105	22·55	157
D	Gateshead (Eighton Cottage) ...	Miss Favell.....	5	3	1	515	22·99	183
D	Ryton-on-Tyne	J. P. Dalton, Esq.....	5	1	0	258 T	25·51	211
D	,, ,, ...	J. W. Smith, Esq., M.D.	5	1	6	...	22·09	140
	NORTHUMBERLAND.							
D	Haltwhistle (Unthank Hall).....	Rev. D. Dixon Brown..	5	0	9	380 T	36·08	210
D	Ovingham (W. Tyne Colliery)...	T. Gilchrist, Esq.	8	2	0	179 ⊼	24·52	183
D	Corbridge (Howden Dene)	J. H. Straker, Esq. ...	5	0	9	200	23·96	180
D	Newcastle (Clifton Road).....	R. Foster, Esq.	8	1	6	314 ⊼	22·69	159
	,, (,, ,.) ..... M	,, ,, ,, ...	5	1	0	314 ⊼	23·18	...
†	,, (Lit. and Phil. Soc.)..	H. Richardson, Esq. ..	8	55	0	160	24·35	...
D†	,, (*Chronicle* Office).....	A. Yarrow, Esq.....	8	30	0	148	23·24	164
†	,, (Northumberland Rd.)	N. H. Martin, Esq. ...	8	45	0	200	23·25	197
†	,, (Gladstone Terrace)...	Mr. W. Smurthwaite...	2	6	0	156 T	21·44	129
	,, (Claremont Road) ...	Mr. T. Bone	4	2	0	240 T	24·41	157
D	,, (Leazes Park)	W. G. Laws, Esq., C.E.	5	1	0	250 ⊼	24·26	170
D†	,, (Town Moor)	A. Wright, Esq.	5	2	0	201 ⊼	24·18	161
D†	,, (Wellburn, Jesmond).	W. H. Holmes, Esq....	5	1	6	161 T	24·75	170
	North Shields (Post Office)	The Meteor. Council ...	8	1	4	100	21·54	174
D	,, ,, (Chirton Cottage)	J. F. Spence, Esq.....	5	0	10	130 T	22·38	169
	,, ,, (Tynemouth)	J. Walker, Esq., C.E...	5	1	8	65 ⊼	20·94	183
Newcastle and Gateshead W.W.	Whittle Dean	G. Smith, Esq.	10		...	...	23·41	...
	Swinburn (Woodford).....	,, ,, ,, ...	10	0	6	500 ⊼	30·97	...
	North Tyne (Green Crag) ...	,, ,, ,, ...	10	0	6	800 ⊼	28·74	...
	,, ,, Valley	,, ,, ,, ...	10	0	6	300 ⊼	28·41	...
	Hallington	,, ,, ,, ...	10	0	6	469 ⊼	28·26	...
	,, (Fawcett)	,, ,, ,, ...	10	0	6	563 ⊼	27·98	...
	Gunnerton Burn (Camphill)..	,, ,, ,, ...	10	0	6	676 ⊼	27·32	...
D	Scots Gap (Wallington)	Mr. Keith	8	2	9	446 T	28·44	179
D	Angerton Hall	Mr. R. Elliott	5	1	0	320 ⊼	30·11	166
	Morpeth	Mr. T. Matheson	8	1	4	90 T	26·17	177
D	,, (Bothalhaugh Garden)..	Hon. & Rev. W. C. Ellis	5	0	10	35 ?	26·76	181
D	,, (,, Lawn)....	,, ,, ,, ,,	5	0	10	137	25·31	181
	,, (,, ,,) M	,, ,, ,, ,,	5	0	10	135	24·99	...

DIVISION X.—NORTHERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground.	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
NORTHUMBERLAND –(*con.*)						
D†Scots Gap (Rothley Crag)	J. Daglish, Esq.	5	0 6	665 T	29·55	171
†Rededale (Horsley)	G. Smith, Esq.	8	1 0	600	30·10	...
†Rothbury (Brinkburn Priory)	Mrs. Hugh Fenwick	8	1 2	257 T	25·92	...
† ,, (Cragside)	Lord Armstrong, C.B.	8	1 0	400 ⅄	32·08	190
†Redewater (Blakehope)	G. Smith, Esq.	8	1 1	830	31 20	...
† ,, (Ellis Crag)	,, ,,	8	1 0	1200	41·21	...
† ,, (Chattlehope)	,, ,,	8	1 0	830	41·47	...
† ,, (Catcleugh)	,, ,,	8	1 0	794	38·50	...
†Alwinton (Biddleston Hall)	P. Dodds, Esq.	5	1 0	820 T	32·68	175
Whittingham (Callaly Castle)	late Major Browne	10	3 10	...	27·70	...
Alnwick Castle	The Meteor. Council	5	0 4	178	31·62	204
D Howick Hall	Rt. Hon. Earl Grey	8	0 10	121 ⅄	27·68	156
Ilderton (Lilburn Tower)	E. J. Collingwood, Esq.	10	6 0	300 T	27·27	...
Wooler	Dr. R. Walker	8	0 10	176 T	30·25	...
D Bamburgh	Mr. W. C. Good	5	1 0	75 L	23·49	181
D Pawston [Coldstream]	B. P. Selby, Esq.	8	1 0	328 T	29·59	215
Wooler (Milfield)	G. Grey, Esq.	5	0 6	215 ⅄	22·59	...
,, (,, Hill)	,, ,,	5	3 0	695 ⅄	19 01	...
D Ancroft (Cheswick)	Gen. Sir W. Crossman.	5	0 8	100 ⅄	22·25	202
CUMBERLAND.						
D Millom (Leyfield)	Cedric Vaughan, Esq CE	5	1 2	81 ⅄	48·47	212
Kirksanton (The Croft)	J. E. Brockbank, Esq.	5	1 5	...	45·18	193
D Ravenglass (The Grove)	A. Watt, Esq.	5	1 2	84 T	41·25	190
D Eskdale	Rev. R. H. Snape	5	1 6	130?	73·06	246
D Boot (Gillbank)	J. Vicars, Esq.	5	1 0	508 T	74·47	216
D Seascale (Whinthwaite)	Dr. Hellon	5	1 0	52 ⅄	36·40	165
Braystones	W. H. Watson, Esq.	10	3 6	36	43·63	...
Sprinkling Tarn M	G. J. Symons, Esq. F.R.S.	4	0 6	1985	137·25	...
Wastdale Head M	,, ,, ,,	4	0 6	204 T	88·17	...
Styehead Tarn M	,, ,, ,,	4	0 6	1472 T	144·50	...
†The Stye A M	,, ,, ,,	4	0 6	1077 T	191·75	...
† ,, ,, B M	,, ,, ,,	4	1 0	1077 T	197·25	...
,, ,, C M	,, ,, ,,	4	1 0	1077 T	197·39	...
,, ,, D M	,, ,, ,,	4	1 0	1077 T	169·96	...
†Seathwaite M	,, ,, ,,	4	0 6	422 T	147·66	...
,,	,, ,, ,,	5	1 0	422 T	145·96	...
D*† ,,	The Royal Meteor. Soc.	5	1 0	420 T	144·19	218
Ullscarf M	G. H. Hill, Esq., C.E.	7	1 8	2100 T	136·70	...
Egremont (Park Ho., Bigrigg)	P. L. Addison, Esq.	5	4 6	290 T	50·69	214
D Cleator (The Flosh)	D. Ainsworth, Esq.	5	1 11	208 T	52·73	168
,, Moor Water Works	R. Robertson, Esq.	5	1 3	395 T	72·87	173
†Helvellyn (Birkside) M	G. H. Hill, Esq., C.E.	7	1 3	1900 T	102·40	...
†Wythburn M	,, ,, ,,	7	1 4	580 T	108·40	...
D Borrowdale Vic.=Rosthwaite	Rev. A. J. Heelis	5	1 0	330 T	120·07	216
,, ,, ,, M	,, ,, ,,	5	1 0	330	124·69	...
D†Buttermere (Hassness)	Mr. S. Stewart	5	1 0	355	118·78?	216
D†Borrowdale (Grange)	Mr. Threlkeld	5	0 9	271 T	104·21	200

DIVISION X.—NORTHERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground.	Height Above Sea Level	Depth of Rain. 1897	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
CUMBERLAND—(*con.*)						
Armboth Fells (The Pewitts)	G. H. Hill, Esq., C.E..	7	1 6	1650 T	100·40	...
Helvellyn (Whiteside)	,, ,, ,, ...	7	1 6	2100 T	93·00	...
Thirlmere (Dale Head Hall) ...	,, ,, ,, ...	7	1 5	620 T	94·30	...
D Winder	G. Scoutar, Esq., C.E..	8	0 8	578 ⅄	54·02	153
D† Whitehaven (Irish Street)	Dr. I'Anson	5	1 1	21 ⅄	41·30	179
D† Keswick (Barrow House)	Miss E. G. Langton ...	8	0 6	282 ⅄	84·42	218
Distington (Gilgarron)	Mr. A. Kydd	5	4 9	470 T	46·97	180
Ullswater (Hallsteads)	S. A. Marshall, Esq. ...	5	2 0	497 T	62·03	...
Keswick (Deer Close)	John Marshall, Esq. ..	7	1 9	300 T	70·21	207
,, (Derwent Island) *old g.*	,, ,, ,, ...	5	0 7	280	68·20	220
,, (,, ,,) *new g.*	,, ,, ,, ...	5	0 6	290	65·67	220
D ,, (Eskin Place)	J. Postlethwaite, Esq...	8	6 4	298 T	67·03	201
D† ,, (Bank)	J. W. Houghton, Esq..	5	1 0	265 T	63·60	196
D† ,, (Shu-le-crow)	A. Mitchell Dawson, Esq.	5	0 7	296 T	69·59	209
Cockermouth (Ullock)	J. H. Walker, Esq. ...	5	1 3	313 ⅄	57·06	192
D ,, (Whinfell Hall) ...	W. Robinson, Esq. ...	5	2 0	265 ⅄	54·12?	223
,, (Fairfield, Lorton).	J. Wilson, Esq.	5	1 6	280 T	54·51	...
D ,, (Brandlingill)	Col. F. R. Sewell	5	1 0	320 ⅄	62·49	208
D Bassenthwaite (Bassenfell)	Mrs. S. G. Rathbone...	8	1 0	384	41·67	197
D† Cockermouth (Higham)	Miss Hoskins	5	1 0	478 ⅄	46·71	197
D ,, (Broughton Grange)	G. S. Wilson, Esq. ...	5	1 3	209 ⅄	46·63	181
Penrith (Nandana)	G. Varty Smith, Esq...	5	4 0	650 T	33·66	236
† ,, (Fell Lane, Fir Bank) ..	T. Lester, Esq.	5	1 0	575 T	34·70	168
,, (Greystoke)	H. Walker, Esq.	5	1 3	650	44·61	...
D ,, (,, Belle View)	Mr. M. Rowe	5	4 0	680 T	38·58	221
,, (Ennim)	Mrs. Riley	8	0 8	660	38·66	207
D ,, (Edenhall Vicarage) ...	B. W. Lovejoy, Esq....	5	1 0	310 T	33·20	208
,, (Kirkland Vicarage) ..	Rev. A. Edwards	5	1 0	640 T	32·28	...
D Bassenthwaite Armathwaite Hall	T. M. Hartley, Esq. ...	8	1 0	...	44·29	218
Maryport (Netherhall)	H. P. Senhouse, Esq...	8	0 6	27 ⅄	39·79	193
D Penrith (Nunwick Hall)	Mrs Heywood Thompson	5	1 0	298 T	31·08	205
D Melmerby	Rev. W. Y. Craig	5	0 6	580	35·74	153
Maryport (Gilcrux)	J. Monkhouse, Esq. ...	8	1 0	262 ⅄	49·80	293
D Aspatria (Brayton Hall)	Mr. W. Stewart	8	2 0	200	49·23	202
D Wigton (Brookfield)	J. J. Jopling, Esq	5	0 9	124 ⅄	40·07	224
Carlisle (Rose Castle)	Miss Bardsley..	8	3 0	200	32·44	163
,, (Wreay Vicarage)	Rev. A. R. Hall	5	2 0	310 T	32·42	205
† ,, (Cemetery)	S. Cartmell, Esq.	8	3 6	114 ⅄	33·44	188
,, (Rickerby House)	M. MacInnes, Esq. ...	8	1 0	50 T	26·64	...
D ,, (Stanwix)	B. Scott. Esq.	8	1 6	100 T	32·53	178
D ,, (Newby Grange)	T. H. Hodgson, Esq....	5	0 8	64 ⅄	28·40	188
,, (Scaleby)	The Royal Meteor. Soc.	5	1 0	112	33·00	...
D Brampton (Denton House)	Mr. J. Charlton	5	1 5	541 ⅄	34·43	206
,, (,, ,,) ... M	,, ,,	5	1 2	541 ⅄	34·40	...
WESTMORELAND.						
D Kirkby Lonsdale (Barbon Manor)	Mr. J. Kidd	6	1 3	650 T	48·82	211
D ,, ,, (,,)	Miss Wilkinson	5	1 0	310 T	53·26	192

DIVISION X.—NORTHERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground. ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1897 inches.	Days on which '01 or more fell.
	WESTMORELAND—(*con.*)							
D	Kendal (Natland Park)	Mrs. Shipley	5	1	0	195 T	50·37	204
D	,, (Helm View)	T. N. Ritson, Esq., C.E.	5	1	0	140 T	57·04	188
	,, (Holmcroft)	R. Rhodes, Esq.	5	1	3	176 T	55·10	...
D	,, (Kent Terrace)	R. J. Nelson, Esq.	5	1	6	146 T	54·64	180
D	,, (Hawesmead)	G. F. Braithwaite, Esq.	8	0	6	175 T	55·44	205
	,, (Ellergreen)	J. Cropper, Esq.	5	1	6	270 T	64·31	211
D	Bowness (Fallbarrow)	H. E. Rawson, Esq.	8	1	0	135 T	66·65	203
	Ambleside (Skelwith Bridge)	A. J. Adams, Esq.	5	1	8	190 T	100·64	220
	Little Langdale (Fell Foot) ...M	S. A. Marshall, Esq.	5	2	2	380	127·05	...
D	Ambleside (Gale House)	G.A.Johnston,Esq.M.D.	5	1	0	250 T	86·08	210
D†	,, (Lesketh Howe)	F.M.T.JonesBalme,Esq	5	2	6	175 T	87·65	218
D	Elterwater (Birch Hill)	Capt. Robinson	5	1	1	243	104·76	219
D	Dungeon Ghyll	S. A. Marshall, Esq.	5	0	5	310	127·42	229
	,, ,, ...M	,, ,, ,,	5	1	6	311	124·20	...
	Mickleden ...M	,, ,, ,,	5	1	6	490	137·63	...
D†	Grasmere (High Close)	F.M.T.Jones Balme,Esq	8	0	9	553 T	96·28	221
D	,, (Pavement End)	T. A. Green, Esq.	5	1	0	214 T	106·49	228
D	Ravenstonedale (Brownber)	J. Fothergill, Esq.	5	3	0	826 T	47·97	175
	Orton Vicarage	Rev. E. Holme	5	3	6	770 T	64·77	214
D†	Kirkby Stephen (Redmaine Ho.)	Mrs. T. Mason	5	1	0	574 T	49·02	204
	Fairfield ... M	T. A. Green, Esq.	5	1	0	2860 T	97·12	...
	,, ... M	,, ,, ,,	8	1	0	2860 T	102·55	...
	Shap (Church View)	W. Wilkinson, Esq.	8	1	2	830 T	54·53	...
D	,, (Hillfield)	A. B. Whiteside, Esq.	5	1	0	834 T	62·27	205
	Grisedale (Ruthwaite Lodge) M	Mr. A. Milne	8	1	6	1750	127·63	...
D†	Patterdale Hall	,, ,,	7	1	3	490 T	99·24	227
D	,, (Greenside Mine)	W. H. Borlase, Esq.	7	1	6	1000 T	110·70	152
	Appleby (Ormside)	Rev. J. Brunskill	5	4	0	480	32·43	170
D	,, (Castle Bank)	C. R. Rivington, Esq.	5	1	2	440 T	36·75	208
	Ullswater (Swarth Fell) ...M	G.J.Symons,Esq. F.R.S.	5	1	3	1000 T	61·40	...
	,, (Sharrow Bay)	Mr. A. Greenlees	5	0	7	500	53·83	...
	Lowther Castle [Penrith]	Mr. F. Clarke	8	3	0	750 T	43·21	153

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.

	MONMOUTH.							
D†	Marshfield (Llwynarthan)	F. G. Evans, Esq.	5	1	1	72 B	43·42	195
D	Portskewett (Sudbrook)	T. D. Roberts,Esq.,C.E.	8	1	6	53 T	34·95	159
	,, (Caldicot Hall)	Rev. E. T. Williams	9	1	3	40	33·80	...
	,, (Porton, Caldicot)	Togarmah Rees, Esq.CE	...	1	3	27	32·73	...
	Newport (Friar Street Yard)	The Meteor. Council	...	...		...	46·37	184
	,, (Ynis-y-bro)	,, ,, ,,	5	1	0	115	39·74	171
D	Ynysddu (W. W. Pontllanfraith)	O. Thomas, Esq.	5	1	0	801 T	62·25	166
D	Chepstow (Shirenewton Hall)	E. J. Lowe,Esq., F.R.S.	8	1	0	531 T	46·93	204
	,, (The Mount)	G. M. Smith, Esq.	5	1	0	150 T	36·23	...
D	,, (Piercefield Park)	H. Clay, Esq.	5	1	6	300	37·84	172
	,, (Itton Court)	E. Curre, Esq.	8	4	6	390	42·83	176

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above SeaLevel feet.	Depth of Rain. 1897 inches.	Days on which '01 or more fell.
MONMOUTH—(*con.*)							
D Llanfrechfa Grange	F. J. Mitchell, Esq.	5	4	0	326 ⅄	50·61	186
Tredunnock	Rev. C. T. Salusbury	5	2	3	170 ⅄	43·03	178
Usk	F. G. Harris, Esq.	8	2	0	60 T	51·14	186
Abersychan (The Hawthorns)	J. W. Mulligan, Esq, MD	5	1	0	755 T	61·63	225
D Tredegar (The Willows)	G. A. Brown, Esq.	8	1	0	1024 T	75·50	190
Blaenavon Gas Works	C. White, Esq.	5	0	9	980	65·25	...
Monmouth (School House)	E. H. Culley, Esq.	5	1	3	76 T	36·47	...
D ,, (The Hendre)	Mr. Coomber	8	1	0	176 T	34·84	188
Abergavenny (Larchfield)	Dr. Glendinning	5	1	0	240 T	42·10	170
,, (Dyne House)	Dr. Steel	5	1	2	220 T	47·78	200
D ,, (The Chain)	W. Baker Gabb, Esq.	5	1	0	250	49·45	215
D Llantilio Court	Sir H. M. Jackson, Bt.	5	0	10	207 ⅄	39·73	152
D Llantilio Crosseny (Brynderi)	Lady Jackson	5	1	2	600 T	36·10	148
D Llanvihangel Court	Col. Sturt	5	2	4	508 ⅄	42·68	191
D Monmouth (Pentwyn)	Rev. J. T. Harding	5	1	0	191 B	35·26	162
GLAMORGAN.							
D Barry	J. Bell, Esq.	5	4	0	191 ⅄	38·80	181
* Cowbridge (Fonmon Castle)	O. H. Jones, Esq.	8	1	2	130	49·37	188
D Barry W. W. (Biglis)	E. W. Waite, Esq., C.E.	5	1	0	20 T	35·22	175
,, ,, (Pencoedtre)	,, ,, ,,	5	1	0	200 T	43·15	...
Penarth (Cwrt-y-Vil)	*Western Mail*	...	...		...	46·98	155
Cardiff (Cogan Pill, Llandough)	C. H. Priestley, Esq. C.E.	5	1	0	122 ⅄	42·72	218
D ,, Castle	Mr. A. Pettigrew	5	1	0	38 ⅄	43·72	181
D ,, (Ely)	C. H. Priestley, Esq. C.E.	5	1	0	53 ⅄	47·57	194
D ,, (Lisvane)	,, ,, ,,	5	1	0	150	40·50	186
,, (New Filters, Heath)	,, ,, ,,	5	1	0	132	46·37	187
,, (Llanishen Res.)	,, ,, ,,	5	1	0	155	44·78	189
D Porthcawl (The Rest)	G. Evans, Esq.	5	1	0	60	37·53	149
Cowbridge (Ash Hall)	E. Tudor Owen, Esq.	8	1	0	315 ⅄	49·69	225
Gower (Penmaen)	Miss Bostock	5	1	0	300 T	43·85	142
D Oystermouth (Newton)	Rev. S. Jones	5	0	9	279 T	51·74	214
Pontypridd (The Reservoir)	W. Jones, Esq.	5	1	0	300	64·55	181
,, (Maesderwen, Graig)	T. Bowen, Esq.	5	10	0	425 T	59·82	198
D Swansea (St. James' Gardens)	T. T. Wood, Esq.	5	1	6	141 ⅄	53·78	206
,, (Uplands Crescent)	W. A. Ford, Esq.	5	1	0	130 T	51·04	207
Briton Ferry	H. A. Clarke, Esq.	5	1	0	33 ⅄	56·66	183
D Morriston (Glanravon)	J. Naysmith, Esq.	5	1	0	53 ⅄	54·10	194
D Neath	E. C. Pole, Esq.	5	1	0	204 ⅄	57·60	213
D ,, (Fairy Land)	Major Green	5	1	9	170 B	57·29	220
D† ,, (Glyncorrwg)	T. F. Brown, Esq., C.E.	5	4	6	717 B	96·55	223
D Mountain Ash (Maesydderwen)	M. Morgan, Esq.	5	1	0	483 ⅄	68·79	202
D Treherbert (Bute Colliery)	Sir W. T. Lewis, Bt.	5	1	0	670	107·31	212
D† ,, (Tyn-y-waun)	A. R. Cawley, Esq.	5	1	0	800	99·30	221
† ,, (,,) M	,, ,, ,,	5	1	0	800	99·82	...
D Gorseinon (Penllergaer)	Sir J. T. D. Llewelyn, Bt.	5	3	0	240 T	53·80	201
Rhondda (Castell-nos Res.)	W. Jones, Esq.	5	1	0	1110	80·81	168

DIVISION XI.—MONMOUTH, WALES AND THE ISLANDS—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which .01 or more fell
GLAMORGAN—(*con.*)							
D Aberdare (The Mardy)	Sir W. T. Lewis, Bt.	5	2	0	431 ⅄	69·92	214
D† ,, (Abernant)	Evan Jones, Esq.	5	4	6	430	69·47	156
D Felindre (Lliw Reservoir)	R. H. Wyrill, Esq., C.E.	8	1	3	426 T	61·61	215
D Crynant (Gelli Dochleithe)	Mrs. Evans	5	5	6	475	59·38	191
D Dowlais (Gwernllwyn)	R. C. Harrison, Esq.	5	1	9	1035 ⅄	63·24	207
,, (Brynonen, Pant)	,, ,, ,,	5	1	9	1140	54·23?	228
D ,, (Cwm Bargoed)	G. A. Lundie, Esq., C.E.	5	1	0	1237 ⅄	55·86	168
D Ystalyfera (Wern Schools)	Mr. J. Williams	5	1	3	240 T	71·77	207
D ,, (Tanyrallt)	Miss H. A. Lewis	8	1	6	300	72·94	211
CARMARTHEN.							
Llanelly (Old Market Place)	G. Watkeys, Esq., C.E.	5	10	0	35 T	46·93	210
D ,, (New Road)	J. F. Young, Esq.	5	0	8	53 T	43·96	204
D ,, (Cwmlliedi W.W.)	G. Watkeys, Esq., C.E.	5	3	0	240 ⅄	53·50	223
Llandilo (Dynevor Castle)	Rt. Hon. Lord Dynevor	8	1	0	202 T	57·20	200
D Llandovery	J. Watkins, Esq.	5	1	0	217 T	50·06	231
D Llanwrda (Dolaucothy)	Gen. Sir J H Johnes, G.C.B	5	2	0	496	56·92	215
PEMBROKE.							
Pembroke (Stackpole Court)	Rt. Hon. Earl of Cawdor	6	1	6	60 ⅄	43·29	213
St. Ann's Head	The Meteor. Council	8	0	8	150	38·09	191
D Haverfordwest (High Street)	E. P. Phillips, Esq.	5	1	0	95 T	50·98	231
D ,, (Picton Castle)	Sir C. Philipps, Bart.	...	...		...	48·70	191
Clarbeston (Penty Park)	Capt. F. Lloyd Philipps	...	...		320	51·77	186
D St. David's	Dr. W. P. Propert	5	1	0	216	37·27	195
D Llanrhian Vicarage	Rev. Prebendary Lewis	5	1	0	295 T	44·58	202
D Castle Malgwyn [Llechryd]	Mr. Baldwin	5	1	0	...	47·16	186
CARDIGAN.							
D Strata Florida (Hafod)	T. J. Waddingham, Esq	5	1	0	580 T	55·92	216
Aberystwith (Castle Grounds)	A. Thomas, Esq.	8	1	0	59	27·77	210
,, (N. Parade)	,, ,,	8	1	0	15	35·14	210
D ,, (Gogerddan)	Sir Pryse Pryse, Bart.	5	1	0	80 B	45·45	184
BRECKNOCK.							
D†Nanthir Reservoir [Aberdare]	O. Williams, Esq., C.E.	5	1	0	860 ⅄	67·78	240
,, ,, [,,] M	,, ,, ,,	5	1	0	860 ⅄	68·45	...
D Colbren (Penwyllt)	Mr. G. Palmer	5	1	0	1108 T	77·68	161
D Ebbw Vale Waterworks	T. J. Thomas, Esq., C.E.	5	1	0	1413 ⅄	72·03	198
D†Taff Fechan (Pentwyn Res.)	T. F. Harvey, Esq., C.E.	5	1	0	1120	75·87	219
† ,, ,, (,, ,,)...M	,, ,, ,, ...	5	1	0	1120	75·94	...
†Cardiff W W (Cwm Taff Fawr No 5)	C. H. Priestley, Esq. C.E.	5	1	0	1143 ⅄	77·48	...
,, ,, (Storey Arms)	,, ,, ,, ...	5	1	0	...	80·90	...
† ,, ,, (Cwm Taff Fawr No 1) M	,, ,, ,, ...	5	1	0	2350 T	80·17	...
,, ,, (Cantreff Res.)	,, ,, ,, ...	5	1	0	1120	79·83	239
,, ,, (Cwm Taff Fawr No. 6)	,, ,, ,, ...	5	1	0	1328 ⅄	91·72	237
,, ,, (Nant Penig)	,, ,, ,, ...	5	1	0	...	95·07	...
D†Taff Fechan (Neuadd Res.) No. 1	T. F. Harvey, Esq., C.E.	5	1	0	1462	73·78	195

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
BRECKNOCK—(*con.*)							
†Taff Fechan (Neuadd Res.) No.1M	T. F. Harvey, Esq., C.E.	5	1	0	1462	73·74	...
D ,, ,, (,, ,,) No.4	,, ,, ,, ...	5	1	0	1487	88·10	195
,, ,, (,, ,,) No.2M	,, ,, ,, ...	5	1	0	1993	83·87	...
,, ,, (,, ,,) No.5M	,, ,, ,, ...	5	1	0	1515	90·10	...
,, ,, (,, ,,) No.7M	,, ,, ,, ...	5	1	0	2017	89·27	...
,, ,, (,, ,,) No.8M	,, ,, ,, ...	5	1	0	1723	97·15	...
,, ,, (,, ,,) No.3M	,, ,, ,, ...	5	1	0	1843	57·90	...
,, ,, (,, ,,) No.9M	,, ,, ,, ...	5	1	0	1997	61·04	...
,, ,, (,, ,,) No.6M	,, ,, ,, ...	5	1	0	2099	101·54	...
Crickhowell (Glanusk Park)	Sir J. R. Bailey, Bt. ...	5	1	0	290	52·70	175
,, (Penmyarth)	S. H. Cowper Coles, Esq.	5	1	0	330	49·23	201
Talybont (Cui)	H. Jones Williams, Esq.	5	1	0	490 T	53·68	...
†Cantreff Rectory ..... *old g.*	Rev. J. J. Evans	5	1	0	630 T	54·19	172
,, ,, ...*new g.*	,, ,, ,, ...	5	1	0	630 T	53·16	...
D Llanfrynach (Tymawr)	Major R. D. G. Williams	5	1	0	450 T	50·05	209
D†Brecknock (The Barracks)	Colonel Browne	5	5	0	447 T	44·79	200
D† ,, (Llandefaelog-fach)..	Rev. W. Williams.....	5	1	0	660 T	52·62	214
D ,, (,, ,,)*new g.*	,, ,, ,, ...	5	1	0	660 T	43·41	212
D Hay (Gwernyfed Park)	Major Wood	5	1	0	350 T	34·11	202
D Llangammarch Wells	Dr. W. Black Jones ...	8	1	0	551 ⅄	49·78	202
D Builth (Tyn-y-berllan)	Dr. Baldock Fry	5	1	0	430 T	40·20	185
D†Abergwesyn Vicarage	Rev. J. Jones	5	1	0	904 ⅄	73·08	228
D Brynwern Hall [Newbridge] ...	Rev. W. Clifton Mogg.	5	1	6	520 T	40·65	198
Llysdinam [,,] ...	Mrs. Lister Venables...	5	1	3	640 T	41·66	208
RADNOR.							
Woodlands [Glasbury]	A. Battiscombe, Esq....	5	1	0	300 T	37·97	200
D Welfield [Builth]	E. A. Thomas, Esq. ...	5	1	10	740 T	41·96	187
D Caerwnon [Builth]	Com. A. Evan-Thomas.	5	1	0	530 T	37·76	217
Old Radnor (Evancoyd)	Mrs. Mynors	8	1	0	760 T	36·61	137
D Llandrindod Wells	Dr. W. Bowen Davies.	5	1	0	711	38·24	209
D New Radnor (Ednol)	Mr. W. Jones.....	5	1	0	950	43·51	206
Llandegley (Gwern-i-Arglwydd)	Mr. J. Campbell	5	2	0	1000	42·24	206
D Pen-y-bont.....	Mr. J. Hamer.....	5	3	6	788	35·72	191
†Rhayader (Nant-y-car) ..... M	G. J. Symons, Esq., FRS	5	1	0	1545	90·45	...
D ,, (Tyrmynydd)	G. M. Yourdi, Esq., CE	5	1	0	832 ⅄	63·38	213
D† ,, (Nantgwillt) ...*old g.*	,, ,, ,, ...	5	1	0	768 ⅄	60·04	216
D† ,, (,,)...*new g.*	,, ,, ,, ...	5	1	0	764 ⅄	66·13	217
† ,, (Bwlchyrhendre) ...M	G. J. Symons, Esq., FRS	5	1	0	1585	62·58	...
D† ,, (Claerwen)	,, ,, ,,	5	1	0	1250	62·95	197
† ,, (Pryddellau) ..... M	,, ,, ,,	5	1	0	1710	63·13	...
D† ,, (Abergwngy)	,, ,, ,,	5	1	0	1200	58·35	197
Knighton (Ystrad House)	E. P. Fairbairn, Esq. C.E.	5	1	0	570 T	33·59	...
Llanbadarn Fynydd (Pen Ithon)	G. A. Haig, Esq.	8	0	3	1130	44·01	...
MONTGOMERY.							
†Llangurig (Esgair Clochfan) M	G. J. Symons, Esq., FRS	5	1	2	1330	43·50	...
† ,, (Ystrad-olwyn-fawr) ...M	,, ,, ,,	8	1	0	950	52·10	...
,, (,, ,, ,,)*new g.*	,, ,, ,,	5	1	0	950	49·20	...

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground.	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
MONTGOMERY—(*con.*)						
Llandinam (Plas Dinam)	late E. Davies, Esq.	5	4 0	504 T	32·58	209
D†Churchstoke (Mellington Hall)	P. Wright, Esq.	5	1 6	540 ⅄	27·19	181
† ,, (,, ,,)M	,, ,, ,,	5	1 6	540 ⅄	27·24	...
Welshpool (Park Lane)	Mrs. Hawksworth	5	1 3	325	25·70	...
D ,, (Pool Quay Vic.)	Rev. R. J. Roberts	5	1 0	230 ⅄	27·03	216
Llangadfan	G. J. Symons, Esq., FRS	5	1 0	...	53·25	...
Garthbibio (Bwlch Tomlyd)...M	,, ,, ,,	5	1 0	1370 T	112·40	...
Meifod (Tan-y-fron)	A. George, Esq.	5	1 0	310	25·21	...
D Lake Vyrnwy	E. D. Marten, Esq. C.E.	5	0 7	770 ⅄	57·82	209
FLINT.						
Hawarden	Gt. Central R. Co.	9	3 6	35	25·14	189
†Flint (Soughton Hall, Northop)	J. Eldon Bankes, Esq.	5	1 0	418	30·93	179
St. Asaph (Nantllys)	P. P. Pennant, Esq.	5	1 0	173 ⅄	23·69	...
D†Halkyn	Capt. Williams	5	1 3	895 ⅄	30·44	171
Bagillt	D. R. Jones, Esq.	5	1 0	20	25·49	...
D Rhyl (Sedgley House)	W. T. Girdlestone, Esq.	5	2 6	21 ⅄	22·93	155
D Prestatyn (Edlestone House)	T. J. Scott, Esq.	5	0 6	30	25·82	131
DENBIGH.						
D Llangadwaladr (Penygwely Res.)	R.O.W.Roberts, Esq.CE	5	1 0	1094	36·72	171
Llangollen (Plas Berwyn)	Col. Tottenham	5	0 5	440	42·52	173
Wrexham (Pack Saddle Res.)	F. Storr, Esq.	5	0 9	370 ⅄	29·81	208
,, (Cae Llwyd Res.)	,, ,,	8	0 9	918 ⅄	34·36	178
,, (,, ,, ,,)	,, ,,	5	0 9	918 ⅄	32·57	178
D ,, (Broughton)	J. Hall, Esq.	5	1 0	500 T	32·31	206
Gresford (Trewythen)	Miss Howell Evans	5	1 0	350	26·04	180
D Rosset (Trevalyn Hall)	Capt. Griffith Boscawen.	5	1 0	58 ⅄	24·29	179
Ruthin (Plas Isaf)	G. F. Lyster, Esq.	...	...	...	21·43	...
Nantglyn (Pant-y-maen)	W. Barker, Esq.	8	1 0	1320 T	46·56	...
D Llangerniew (Hafodunos)	Col. Sandbach	5	1 0	512 T	45·11	184
Llanefydd (Rhyl W.W., S.)...M	L. G. Hall, Esq., C.E.	5	1 0	600	28·43	...
,, (,, ,, W.)...M	,, ,, ,,	5	1 0	580	27·86	...
,, (,, ,, E.)...M	,, ,, ,,	5	1 0	570	24·44	...
D ,, (Plas Uchaf Res.)	,, ,, ,,	5	1 0	485	25·49	135
D Denbigh (Garn)	W. D. W. Griffith, Esq.	5	1 0	447 T	31·83	194
Dolben [St. Asaph]	T. G. Dixon, Esq.	5	1 2	...	29·72	180
Trefnant (Maes Elwy)	Major Birch	5	2 0	157 T	32·81	157
D Colwyn Bay (Nant-y-Glyn)	A. O. Walker, Esq.	5	1 0	180 ⅄	29·55	179
D ,, (Ingleside)	Harold Smith, Esq.	8	1 0	75 ⅄	29·25	192
,, (Bryn Euryn)	Mr. T. Hutchings	5	1 0	125 T	29·00	185
MERIONETH.						
†Dolgelly (Werngoch)	O. Hill, Esq.	5	1 6	465 T	71·95	...
,, (Dolmelynllyn)	The Meteor. Council	5	1 2	225	89·72	205
D Bala (Eryl Arran)	Mrs. Burton	8	1 0	590 T	55·73	214
D Llanderfel (Palé Gardens)	Mr. T. Ruddy	8	1 0	606 ⅄	48·31	219
Arenig (Bodrennig)	E. Jones, Esq.	5	1 0	1100 T	67·55	196

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground.	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
MERIONETH—(*con.*)						
D Bl.Ffestiniog(NewWelshQuarry)	New Welsh Slate Co....	8	1 2	1060 T	115·82	238
D Rhiwbryfdir=Oakley Quarries..	Mr. R. Roberts	5	10 0	1100	100·48	240
D Corwen (Rhug Gardens)	Mr. J. Bennett	5	1 0	500	34·83	208
CARNARVON.						
D*Llanystumdwy (Talarvor)	Dr. J. Roberts	5	2 0	49	37·56	147
Llandwrog (Glynllivan Park) ...	Hon. F. G. Wynn.....	5	1 0	100	53·27	...
,, (,, Garden) ...	,, ,,	5	1 0	170	53·20	204
,, (,, Fort)	,, ,,	8	1 0	180	47·12	...
,, (Bodfean)	,, ,,	5	1 6	80	41·09	...
D Llanberis (Glyn Padarn)	Major Allen	6	6 0	370	79·34	186
Capel Curig (Lake Cowlyd)	T. B. Farrington, Esq.	8	1 3	1168 ⅄	73·50	...
Carnarvon (Belan Fort).....	Hon. F. G. Wynn.....	5	1 0	15	40·64	...
Llanbedr-y-Cennin	E.P.StephensonEsq.CE	8	1 0	509 ⅄	59·61	189
D ,, ,, ,, (Llyndulyn)	,, ,, ,,	8	1 6	1622 T	82·77	...
D†Llandudno (Warwick House) ...	Dr. Nicol	5	1 0	90	30·67	193
ANGLESEA.						
Llandwyn Island	Hon. F. G. Wynn	5	1 0	30	22·07	...
D Llangadwaladr (Bodorgan)	Mr. J. Gray	8	3 6	...	40·21	178
D Penmynydd Vicarage	Rev. H. D. Owen	5	5 0	300	39·71	204
Holyhead	The Meteor. Council ...	8	...	...	36·52	198
LlanerchymeddLlwydiarthEsgob	T. Prichard, Esq.	5	1 0	112 L	38·79	214
D Lligwy	Rt. Hon. Lord Boston..	5	1 0	180	42·15	174
ISLE OF MAN.						
Castletown (Langness)	Bd. of Northern Lights	...	...	...	35·00	...
Derbyhaven	A. W. Moore, Esq.....	5	1 0	20	35·44	...
Santon Vicarage	,, ,, ,, ...	...	...	250	37·45	179
D Douglas (Victoria Road)	H. Story, Esq.	5	0 9	160 L	44·77	201
,, (Cronkbourne)	A. W. Moore, Esq. ...	8	0 10	138 ⅄	44·92	203
,, (Clypse, Onchan)	,, ,, ...	8	1 0	439 T	47·07	201
Bishops Court...	,, ,, ...	...	...	80	39·77	...
Ramsey	,, ,, ...	8	1 3	18	52·97	...
Point of Ayre.....	Bd. of Northern Lights	...	...	...	28·99	159
ISLES OF SCILLY.						
St. Mary's	The Meteor. Council ...	8	1 6	77 L	35·73	214
,, ,, ...	Gavin Hope, Esq.	...	...	...	34·82	217
†Tresco Abbey	T. A. D. Smith, Esq...	11	3 0	40	36·55	195
JERSEY.						
D St. Helier (St.Louis Observatory)	Rev. M. Dechevrens ...	8	5 0	180	32·93	192
St. Aubins	The Meteor. Council ...	8	1 0	...	36·21	200
GUERNSEY.						
D St. Martin's (Les Blanches)	B. T. Rowswell, Esq....	5	1 0	310 T	37·27	213
L'Erée (Claire Mare)	J. J. Carey, Esq.	5	1 0	30	31·10	166
D St. Peter Port (Beaulieu)	A. Collenette, Esq. ...	5	1 0	190 L	38·47	200
D ,, ,, (Villa Carey).....	Dr. Carey	8	1 2	180	33·58	173
,, ,, (,, ,,)... M	,, ,, ...	5	1 2	180	32·99	...
D L'Ancresse	A. Collenette, Esq.....	5	1 0	33 T	33·77	127

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground.	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	WIGTON.						
	Mull of Galloway	Bd. of Northern Lights	...	...	...	29·11	153
D	Garliestown (Galloway Ho.)	Mr. J. Day	5	4 6	20 ?	45·48	167
D	Stoneykirk (Ardwell House)	Sir M.J.Stewart,Bt.MP	8	3 9	107 T	40·62	162
	Loch Ryan	Bd. of Northern Lights	...	...	...	32·80	157
	Corsewall	,, ,, ,, ...	...	3 4	22 ?	34·29	132
	KIRKCUDBRIGHT.						
	Little Ross	Bd. of Northern Lights	...	3 3	130 ?	34·88	134
	Kirkcudbright (Balmae)	Countess of Selkirk ...	5	0 8	150	36·44	...
D	,, (Senwick)	A. J. Corrie, Esq.	5	1 0	113 ⅄	42·73	205
	,, (,,) M	,, ,, ,, ...	5	1 0	113 ⅄	42·52	...
	Auchencairn (Torr House)	W. Ovens, Esq.	5	0 8	50	50·56	...
	Dalbeattie (Colvend Manse)	Rev. Dr. Fraser	5	1 6	120 T	36·60	...
	Gatehouse (Cally)	Dr. Buchan, F.R.S. ...	5	1 0	50	54·38	196
	Dalbeattie (Little Richorn)	Mr. W. Kerr	5	0 6	35 L	49·80	198
	Creetown (Cassencary)	J A Henryson-Caird, Esq	5	0 8	40	45·38	...
D	,, (Cuil Park)	J. McTurk, Esq.	5	0 6	80	50·76	154
D	Kirkpatrick Durham (Glenlair)	Major Maxwell	5	0 8	250 T	55·54	149
D	Cargen [Dumfries]	R. F. Dudgeon, Esq.	5	1 0	80 ⅄	49·48	168
D	New Galloway (Glenlee)	Mr. W. Melville	5	1 3	208	62·24	227
D	Dalry (Glendarroch)	J. Barbour, Esq.	5	0 11	192 T	57·70	181
D	,, (Old Garroch)	T. R. Bruce, Esq.	8	6 0	250	62·54	205
	Irongray (Drum Park) ...*new g.*	D. J. Kay, Esq.	5	1 0	230	57·11	...
	Glenhead of Trool	Mr. J. McMillan	5	0 11	320	82·35	117
	Carsphairn(Holm of Dalquhairn)	R. McMillan, Esq.	5	1 2	800	67·90	...
	DUMFRIES.						
D	Dumfries (Ivy Bank)	Rev. W. Andson	5	0 10	70 T	42·81	215
	Canobie (Byreburnfoot)	Mr. D. Crabbe	3	...	...	46·12	...
D	Lochmaben (Esthwaite)	W. J. Halliday, Esq.	5	1 0	166 B	44·88	211
	Shieldhill (Tinwald Reservoir)	Mr. J. Bell	5	1 6	470 ⅄	45·82	...
D	Langholm	Mr. W. Jackson	5	0 9	270	62·38	184
	Moniaive (Glencrosh)	Miss M. R. McMillan	5	1 2	350	60·85	160

DIVISION XII.—SOUTHERN COUNTIES (*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground.	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell
			ft. in.	feet.	inches.	
DUMFRIES—(*con.*)						
D Moniaive (Maxwelton House) ...	Rev. Sir E. Laurie, Bt.	8	1 2	400 ⅄	53·02	205
,, (,, Garden)...	,, ,, ,,	6	...	350	54·43	...
Langholm (Ewes School)	Mr. J. C. Lyall	3	1 0	445 T	58·25	...
,, (,, Burnfoot)	J. C. Little, Esq.	3	1 0	541 ⅄	59·08	...
Durrisdeer(DrumlanrigGardens)	Mr. D. Inglis	4	0 9	191	42·00	...
Moffat (Craigielands).....	Mr. L. Frazer.....	5	0 9	360 T	58·31	...
,, (Ericstane)	J. J. Welsh, Esq.	3	0 6	550	68·55?	...
ROXBURGH.						
Hawick (Wolfelee)	Dr. Buchan, F.R.S. ...	5	0 6	601	42·34	197
D ,, (Branxholme)	J. G. Winning, Esq.....	5	0 6	457 ⅄	32·37	162
D ,, (Ladylaw)	T. Wilson, Esq.....	5	0 10	448	33·92	198
*Jedburgh (Sunnyside)	G. Hilson, Esq.	5	6 0	351 ⅄	26·51	141
D ,, (Ancrum Bridge).....	A. Johnston, Esq.	...	...	229	27·10	188
D Lilliesleaf (Riddell)	Gen. Sprot	5	0 8	550 T	30·86	212
,, (,,)	Mr. J. Williamson.....	5	0 8	500 T	30·38	165
D St. Boswell's (Elliston).....	The Hon. G. Dalrymple	5	1 0	352	27·47	197
Kelso (Springwood Park)	Mr. W. Chaplin.....	10	1 0	130 L	21·94	146
,, (Broomlands)	Dr. Buchan, F.R.S. ...	...	...	205	23·81	140
D Melrose (Asylum).....*old g*	Mr. Pattman	5	0 6	480 T	29·79	208
,, (,,)	,, ,, ...	5	1 0	480 T	28·73	208
D Wooplaw [Galashiels]	J. Murray, Esq.....	5	1 0	880 ⅄	30·87	173

DIVISION XIII.—SOUTH EASTERN COUNTIES.

SELKIRK.						
D Selkirk (The Hangingshaw) ...	Miss Johnstone	5	0 6	670 T	40·40	168
Galashiels (Abbotsford Rd.).....	Dr. Somerville	5	0 6	416 T	29·25	197
,, (Stantling Craigs) ...	Mr. W. Ross	12	1 3	650	31·87	...
PEEBLES.						
Innerleithen (The Glen)	Dr. Buchan, F.R.S. ...	...	...	...	44·80	...
Stobo Castle	,, ,, ,, ...	...	...	600	32·50	173
Innerleithen (Leithen Lodge) ...	Mr. D. Clark	11	0 0	700 T	37·08	...
Kirkurd (Castle Craig).....	Dr. Buchan, F.R.S. ...	...	...	830	30·48	167
Eddlestone (Portmore Res.).	W. Anderson, Esq.....	11	0 6	1000	32·46	208
D N. Esk Reservoir [Penicuick]...	Mr. W. Tod	11	0 6	1150 ⅄	38·35	183
BERWICK.						
D Coldstream (The Hirsel)...*new g.*	Mr. Cairns	5	1 0	94 ⅄	23·38	197
D Marchmont House	Mr. J. A. Wood.....	5	1 0	500 T	29·00	204
Dunse Castle	Mr. R. Aikman	5	1 0	500	30·84	162
West Foulden	H. H. Craw, Esq.	5	1 0	250 T	22·86	...
Longformacus (Rawburn).....	,, ,, ,, ...	3	0 6	920 T	30·00	...
St. Abb's Head	Bd. of Northern Lights	...	0 4	211	20·77	126

DIVISION XIII.—SOUTH EASTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	HADDINGTON.						
D	Drummore [Musselburgh]	Mr. J. Robson	5	0 8	75 T	21·47	190
D	Whittinghame Gardens	Mr. J. Garrett	5	1 0	348 B	26·82	146
D	Haddington (Asylum)	J. Mowat, Esq.	5	1 0	240 T	23·77	200
	Prestonkirk (Smeaton)	Dr. Buchan, F.R.S.	...	...	100	20·45	135
	Aberlady	,, ,, ,,	...	...	...	22·62	...
	North Berwick Reservoir	Mr. J. McKellar	11	1 6	150 T	23·56	...
	,, ,, (Fidra)	Bd. of Northern Lights	...	...	...	20·82	...
	EDINBURGH.						
	Moorfoot Hills (Bowbate)	W. Anderson, Esq.	11	0 6	2042	42·19	...
	,, ,, (Gladhouse Res.)	,, ,, ,,	11	0 6	900	33·31	196
	,, ,, (Rosebery)	,, ,, ,,	11	0 6	750	28·09	...
	Pentland Hills (Crosswood)	,, ,, ,,	11	0 6	950	37·20	...
	Penicuick (Edgelaw Res.)	,, ,, ,,	11	0 6	654	27·89	...
	Pentland Hills (Harper rig)	,, ,, ,,	11	0 6	900	37·66	...
	,, ,, (Harehill)	,, ,, ,,	11	0 6	1470	39·11	...
	,, ,, (Loganlea)	,, ,, ,,	11	0 6	850	36·28	...
	West Calder (Addiewell)	J. Fyfe, Esq.	5	0 6	600	38·29	...
	Rosewell Asylum	Dr. Buchan, F.R.S.	...	...	690	31·05	203
	Pentland Hills (Swanston)	W. Anderson, Esq.	11	0 6	550	25·13	...
	,, ,, (Glencorse Res.)	,, ,, ,,	11	0 6	787	35·20	172
	,, ,, (Harlaw)	,, ,, ,,	11	0 6	800	31·69	...
	,, ,, (Clubbiedean Res)	,, ,, ,,	11	0 6	750	29·85	...
	,, ,, (Harbour Hill)	,, ,, ,,	11	0 6	1112	41·12	...
D	Dalmahoy	Countess D. of Morton	5	0 10	358	27·89	180
	Liberton (Alnwick Hill)	W. Anderson, Esq.	11	0 6	400	25·36	158
D	,, (R. Obs. Blackford Hill)	Dr. Copeland	8	1 0	442 T	22·22	151
	,, (,, ,, ,, ,,)	,, ,,	5	28 0	460	12·77	...
D	Edinburgh (Blacket Place)	R. C. Mossman, Esq.	8	0 8	252 T	24·79	185
D	,, (City Observatory)	W. Peck, Esq.	8	0 10	349	22·34	158
	,, (Royal Botanic Garden)	Mr. A. D. Richardson.	8	1 0	74 T	22·27	186
	Leith	The Meteor. Council	8	1 8	22	20·52	171
	,, (Navigation School)	Dr. Buchan, F.R.S.	5	0 5	70	24·48	196
	LINLITHGOW.						
	Whitburn (Polkemmet)	Lady Baillie	5	2 0	600 T	38·58	219
	Uphall	J. Fyfe, Esq.	5	0 9	380	30·19	...
	Carribber Reservoir	W. H. Henderson, Esq.	...	...	400	34·01	...
D	Linlithgow (Nether Parkley)	,, ,, ,,	5	0 3	290 T	33·19	175

DIVISION XIV.—SOUTH WESTERN COUNTIES.

	LANARK.						
D	Biggar (Cambus Wallace)	Captain Paul	6	0 6	748 T	33·03	185
D	Cleghorn	W. Eliott Lockhart, Esq.	3	0 3	720	39·88	217

DIVISION XIV.—SOUTH WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	LANARK—(*con.*)						
D	Dalzell House	Rt. Hon. Lord Hamilton	6	5 6	89 T	30·46	162
	Hamilton Water Works	Mr. R. Watson	7	1 0	436 T	37·40	...
D	,, (Ardenclutha)	Rev. T. M. B. Paterson	5	1 9	260 T	36·12	181
	Bothwell Castle	Mr. W. F. B. Archibald	10	18 0	146 T	30·74	170
	Uddingston (View Park)	J. Addie, Esq.	5	1 6	180	33·30	...
	Glasgow (Green Park)	J. Whitton, Esq.	5	0 6	35	37·66	...
	,, (Alexandra Park)	,, ,, ,,	5	0 6	141	37·17	...
	,, (Kelvin Grove Park)	,, ,, ,,	5	0 6	48	40·53	...
	,, (Belvedere Hospital)	Dr. Buchan, F.R.S.	...	...	54	48·07	201
	,, Observatory	J. Connell, Esq.	11	2 0	182	39·71	203
	,, (Springburn Park)	J. Whitton, Esq.	5	0 6	361	37·68	...
D	Airdrie (Hillend Reservoir)	Mr. W. A. Ritchie	6	4 6	620 ⅄	36·70	111
	AYR.						
	Ballantrae (Glendrishaig)	P. Murdoch, Esq.	5	1 0	42	37·90	185
	Barrhill (Dochroyle) M	Mr. J. Scott	6	0 6	548 T	53·16	...
D	Colmonell (Clachanton)	R. Aitken, Esq.	6	0 6	140 T	46·30	190
D	Girvan (Pinmore)	Capt. Hamilton	5	1 0	187 ⅄	48·64	202
D	Barr Manse	Rev. G. Dods	5	1 0	330	53·56	209
	Girvan (Turnberry)	Bd. of Northern Lights	...	...	...	43·32	158
D	Dalmellington (Benquhat)	A. Gillespie, Esq.	...	1 6	1068	52·39	220
	Maybole (Culzean Gardens)	Mr. D. Murray	9	3 0	200	38·00	...
D	,, (Sauchrie)	E. A. Miller, Esq.	5	1 0	380	45·51	209
	Muirkirk (Glenbuck)	Mr. W. F. Hamilton	6	1 0	900	51·50	...
	Kilmarnock (North Craig)	R. Blackwood, Esq.	12	1 0	319 ⅄	42·25	...
	Ardrossan	The Meteor. Council	8	1 0	10	30·48	205
D	,, (Kirkhall)	H. F. Weir, Esq.	8	2 9	106 ⅄	38·51	195
	Paisley W. W. (Camphill)	J. W. Moncur, Esq. C.E.	12	1 6	611	62·04	...
	Shaws W. Works (Kelly Dam)	R. Gilmour, Esq., C.E.	6	1 0	640 ?	58·50	...
	,, ,, (Knockencorsan)	,, ,, ,,	6	1 0	1040	61·20	...
	RENFREW.						
	Lochwinnoch (Garthland)	H. Macdowall, Esq.	5	0 11	150	64·04	183
	,, (Castle Semple)	Mr. J. M. McMillan	6	30 0	240	47·19	190
Gorbals's Dist.	Ryat Lynn	J. M. Gale, Esq., C.E.	8	0 5	310	54·65	...
Gorbals's Dist.	Waulk Glen	,, ,, ,,	12	0 5	280	53·10	...
Gorbals's Dist.	Middleton	,, ,, ,,	12	0 5	550	63·70	...
Gorbals's Dist.	Nether Cairn	,, ,, ,,	12	0 5	700	60·60	...
Paisley W. Works	Stanely	J. W. Moncur, Esq., C.E.	12	1 0	190	40·82	...
Paisley W. Works	Back Thornleymuir	,, ,,	12	1 0	646	54·28	...
Paisley W. Works	Muirhead	,, ,,	12	1 0	482 ⅄	54·29	...
Paisley W. Works	Springside	,, ,,	12	1 0	532 ⅄	58·31	...
D	Glasgow (Queen's Park)	J. Whitton, Esq.	8	0 9	144 ⅄	40·22	160
	,, (Maxwell Park)	,, ,, ,,	5	0 6	69	38·38	...
	Paisley (Crookston)	Major Hotchkis	3	0 5	...	38·15	137
	,, (The Coats Observatory)	Dr. Buchan, F.R.S.	...	...	107	40·97	223

DIVISION XIV.—SOUTH WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which ·01 or more fell.
	RENFREW—(*con.*)							
Shaws Water Works.	Duchall Moor	R. Gilmour, Esq., C.E.	6	1	0	1150	65·90	...
	Creuch Hill	,, ,, ,, ...	6	1	0	1100	62·80	...
	Largs Road	,, ,, ,, ...	5	1	0	910	62·50	...
	Green Water	,, ,, ,, ...	6	1	0	788 ⅄	69·50	...
	Gryfe Reservoir	,, ,, ,, ...	6	1	0	640 ⅄	68·00	187
	Mansfield	,, ,, ,, ...	5	1	0	573 ⅄	66·16	254
	Compensation Reservoir	,, ,, ,, ...	5	1	0	600	59·03	258
	Loch Thom	,, ,, ,, ...	5	1	0	643 ⅄	59·29	258
	Shielhill	,, ,, ,, ...	6	1	0	962 ⅄	63·80	...
	Darndaff Moor	,, ,, ,, ...	6	1	0	850	71·20	...
	Spango Burn	,, ,, ,, ...	6	0	9	757 ⅄	65·60	...
	Hole Glen	,, ,, ,, ...	5	1	0	603	61·81	255
	New Yetts Dam	,, ,, ,, ...	5	1	0	800	64·95	254
D	Prospect Hill	,, ,, ,, ...	5	1	0	233	63·02	224
	Port Glasgow (Dougliehill Res.)	S.W. Dalzell, Esq., C.E.	5	1	0	549 ⅄	60·44	192
	,, ,, (Auchendores Res)	,, ,, ,, ...	5	1	0	321 ⅄	54·89	192

DIVISION XV.—WEST MIDLAND COUNTIES.

	DUMBARTON.							
	New Kilpatrick (Chesters)	J. Kennedy, Esq.	5	1	0	245 T	43·80	...
D	Dumbarton (Leven Shipyard)	Messrs. Denny, Bros.	5	1	0	9 T	49·95	247
D	Helensburgh (Victoria Road)	L. P. Muirhead, Esq.	5	6	0	90	43·94	193
D	,, (Water Works)	J. R. Wilson, Esq.	...	0	6	300	41·64	219
	Arrochar	Rev. J. Dewar	5	0	9	12	70·25	...
	STIRLING.							
	Strathblane (Mugdock Reservoir)	J. M. Gale, Esq., C.E.	8	0	6	320	50·60	...
D	,, (Craigend Castle)	Sir J. Buchanan, Bart.	5	0	9	543 T	60·89	243
	Banton by Bonnybridge Craigdouffie	J. J. Cadell, Esq.	5	0	6	715	52·63	...
	Falkirk (Kerse)	C. Brown, Esq.	8	1	0	18	33·50	...
	,, (,,) ...*new g.*	,, ,,	5	0	10	18	33·90	...
	Larbert (Carron Park)	J. J. Cadell, Esq.	5	0	4	80	30·38	...
	Little Denny Reservoir	W. W. Neilson, Esq., C.E	...	4	6	315	36·68	...
	,, ,, Filters	,, ,, ,,	...	...		...	39·13	...
	Earlsburn Reservoir	,, ,, ,,	...	4	6	1205	57·66	...
	St. Ninians (Faughlin)	,, ,, ,,	...	4	6	737	46·01	...
	Stirling (Touch Reservoir)	Col. J. S. Stirling	...	...		760	47·32	...
	,, (Polmaise Gardens)	Mr. W. W. Ritchie	6	1	3	12	37·68	...
	,, (Victoria Place)	R. Kidston, Esq.	5	2	10	100	41·87	...
D	Buchlyvie (The Manse)	Rev. J. A. Macdonald	5	1	3	118 T	51·19	230
	Gargunnock	Col. J. S. Stirling	5	5	8	85 T	47·88	...
	Kippen (Arngomery)	,, ,, ,,	...	...		...	46·09	...
	,, (Garden House)	,, ,, ,,	...	...		...	46·65	...
	Ben Lomond	J. M. Gale, Esq, C.E.	...	...		1800	86·20	...
	Glengyle	,, ,, ,,	...	...		38	96·10	...

DIVISION XV.—WEST MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain 1897	Days on which .01 or more fell.
				ft. in.	feet.	inches.	
	BUTE.						
	Arran (Pladda)	Bd. of Northern Lights	...	...	...	38·70	170
	Holy Island (Lamlash)	,, ,, ,,	...	...	...	53·70	139
D	Rothesay (Barone Cottage)	J. Kay, Esq.	5	1 0	116 ⅄	44·72	219
D	,, (Crichton Road)	H. Lauder, Esq.	5	4 0	97	50·46	232
	ARGYLL—(MAINLAND.)						
	Tighnabruaich	A. S. Cousland, Esq.	5	4 0	30	54·38	209
D	,,	,, ,, ,,	12	5 0	50	56·97	209
	Loch Eck (Benmore)	H. J. Younger, Esq.	5	1 0	40	90·07	221
D	Lochgilphead (Poltalloch)	Mr. D. S. Melville	3	4 6	135	49·02	209
	,, (,,) M	,, ,, ,,	8	0 6	135	50·55	...
D	Inverary Castle	Mr. G. Taylor	5	1 0	40	78·20	226
D	,, (Newtown)	Mrs. Little	5	1 0	17	72·61	231
	Oban (Loch-na-gleann-na-brathrach)	Dr. T. H. O'Reilly	11	1 2	370	57·00	...
D	,, (The Corran)	Dr. Baily	5	1 0	20	55·01	202
	Appin (Airds) M	R. Macfie, Esq.	5	0 11	41 ⅄	53·75	...
D	Morvern (Drimnin)	Mrs. Gordon	5	1 0	225	57·43	220
D	Ballachulish (Ardsheal)	Dr. W. D. Anderson	8	1 0	103 T	67·07	216
	,, (Craigrannoch)	D. Campbell, Esq., M.D.	8	1 0	15	85·86	214
D	Strontian (Laudale)	A. Fletcher, Esq.	8	1 0	15 ⅄	58·38	238
D	Loch Sunart (Glenborrodale)	C. D. Rudd, Esq.	5	0 2	60 L	56·77	181
	Ardgour House	Mrs. Maclean	3	0 9	72	70·80	208
	Ardnamurchan	Bd. of Northern Lights	...	3 6	28 ?	41·58	196
	Loch Eil (Corran)	,, ,, ,,	...	0 4	14 ?	78·55	174
	ARGYLL—(INSULAR.)						
	Kintyre, Mull of	Bd. of Northern Lights	...	...	279 ?	40·99	136
	,, (Campbeltown, Devaar)	,, ,, ,,	...	3 4	75 ?	47·14	197
	,, (Skipness Castle)	Mr. P. McLean	5	1 6	27	51·03	...
	,, (Stonefield, Tarbert)	Colin G. Campbell, Esq	5	0 9	90	70·35	229
D	Gigha	A. Hugh Douglas, Esq.	5	1 6	40	38·84	228
D	Islay (Ardbeg)	C. Hay, Esq.	5	7 0	46 T	40·44	183
	,, (Rhinns)	Bd. of Northern Lights	...	3 0	74 ?	36·74	190
	,, (Lochindaul)	,, ,,	...	...	...	42·72	168
	,, (McArthurshead)	,, ,,	...	...	...	36·45	221
D	,, (Eallabus)	J. Forbes, Esq.	5	1 0	68 T	45·67	190
	Jura (Bay of Small Isles)	H. Evans, Esq.	...	...	80	61·10	...
	,, (Fladda)	Bd. of Northern Lights	...	...	...	59·89	151
	,, (Ardfin)	Miss J. H. Campbell	5	0 6	130	50·02	...
	Lismore (Mousedale)	Bd. of Northern Lights	...	3 4	37 ?	42·01	167
	Mull (Lochbuie)	Dr. Buchan, F.R.S.	...	...	20	73·24	...
D	,, (Quinish)	J. N. Forsyth, Esq.	5	1 6	35	52·32	213
	,, (Sound of)	Bd. of Northern Lights	...	...	...	53·33	176

DIVISION XVI.—EAST MIDLAND COUNTIES.

	CLACKMANNAN.						
	Alloa (Mar Street)	J. Melville, Esq.	5	0 6	70	35·12	...
	Alva House	Miss Johnston	5	1 2	180	39·28	...
D	Dollar	Mr. A. Blackwood	9	1 0	178	41·98	180

DIVISION XVI.—EAST MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	KINROSS.						
	Blairingone [Dollar]	Rev. J. F. Cameron ...	5	1 6	300 T	40·20	184
	Cleish Castle	Dr. Buchan, F.R.S. ...	...	...	...	41·22	...
D	Loch Leven Sluice	Mr. W. Clark	7	0 7	360 L	38·10	157
D	Kinross (Gellybank)	G. Henderson, Esq. ...	5	0 6	440 R	36·06	197
	FIFE.						
	Inchkeith	Bd. of Northern Lights	...	...	...	27·80	...
D	Culross (Westgrange)	J. J. Dalgleish, Esq.	5	0 2	116 R	34·14	197
D	Dunfermline (Keavil)	L. Dalgleish, Esq.	5	0 2	150	26·05	179
	Carnock (Luscar House) ...No. 1	A. Mitchell, Esq.	5	0 10	430 T	33·52	...
	,, (,, ,,) ...No. 2	,, ,,	5	0 10	430 T	33·55	...
D	Beath (Outh)	L. Dalgleish, Esq.	5	0 2	890	53·17	125
	Isle of May	Bd. of Northern Lights	...	...	...	18·70	...
	Pittenweem (The Priory)	Rev. F. K. Lloyd	5	0 10	50	23·48	...
	Kilconquhar (Balcarres)	Mr. E. Tate	5	1 0	300 T	30·09	203
D	Carnbee (Ovenstone W.W.)	A. Watson, Esq.	5	1 0	168 L	24·59	169
	Leslie (Lothrie Reservoir)	Dr. Buchan, F.R.S. ...	...	...	...	38·12	...
D	Cupar (Fife & Kinross Asylum)	Dr. Turnbull	5	0 4	210	25·84	152
	Kilmany (Mountquhanie House)	D. Gillespie, Esq.	3	1 3	240	28·10	...
	Balmerino	Col. F. J. Stuart Gray	5	1 3	60 T	28·55	221
D	Tayport	G.C.Buchanan,Esq., CE	5	1 0	27	25·58	150
	PERTH.						
	Aberfoyle	J. M. Gale, Esq., C.E.	8	0 6	60	62·90	...
	Ochtertyre [Stirling]	Capt. Dundas, R.N. ...	5	1 0	18	40·41	...
	Dunblane (Kippenross)	Col. P. Stirling	3	1 3	150 R	50·60	...
	,, (Kippendavie Lodge)	Mr. J. O. Anderson ...	8	2 9	400	37·54	...
D	Doune (Gartincaber)	G. Burn Murdoch, Esq.	5	1 0	200 T	39·52	214
	Sheriffmuir (Lynns Farm)	Col. P. Stirling	...	1 0	680	40·77	...
	Loch Dhu	J. M. Gale, Esq., C.E.	8	0 6	325	80·00	...
	Ledard	,, ,, ,,	...	...	1500	60·15	...
	Loch Drunkie	,, ,, ,,	8	0 6	420	67·40	...
	,, Vennachar	,, ,, ,,	8	0 6	275	55·95	...
D	Lanrick Castle	Mr. J. Begg	3	1 0	...	46·50	153
	Bridge of Turk	J. M. Gale, Esq., C.E.	8	0 6	275	64·50	...
	Loch Katrine (Tunnel Hill Top)	,, ,, ,,	8	0 6	830	86·90	...
	Between Glen Finlas & Ben Ledi	,, ,, ,,	8	0 6	1800	45·55	...
	Callander (The Gart)	C. Douglas, Esq.	5	0 7	250	59·40	...
	Braco (Nether Cambushinnie)	Col. Stirling	8	2 9	550	48·12	...
	Abernethy	Dr. Buchan, F.R.S. ...	...	...	...	37·00	...
	Balquhidder (Blaircreach)	J. Carnegie, Esq.	5	...	460	91·02	...
D	,, (Stronvar)	,, ,, ,,	6	1 0	422 T	80·69	238
D	Crieff (Ochtertyre)	Mr. G. Croucher	5	2 6	326 T	44·55	206
	Perth (Kinfauns Castle)	Col. F. J. Stuart Gray	5	16 0	150 T	23·58	181
	,, (Rosebank)	Dr. Buchan, F.R.S. ...	...	...	140	30·57	192
	,, (Huntingtower Field)	Mr. A. Bayne	6	1 0	40	28·10	...
	Killin (Auchmore)	Mr. J. Cant	...	...	400	66·54	...
D	Coupar Angus Station	Mr. J. Robertson	5	1 3	183 T	29·14	185

DIVISION XVI.—EAST MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
PERTH—(*con*).						
D Dunkeld (Inverbraan)	Rev. J. M. B. Murdoch	5	1 0	500	45·77	134
D Ballinluig	Mr. J. Morrison	5	1 0	250 T	37·95	196
Pitlochry (Donavourd)	W. Maxwell, Esq.	6	0 7	400	36·80	...
,,	T. Renny, Esq.	5	1 0	...	37·74	...
Blair-Atholl	Mr. A. Cameron	5	1 0	420	32·94	193
D Dalnaspidal (H.R.S.)	The Station Agent	5	3 0	1414 T	69·01	247
FORFAR.						
D Buddonness	G.C.Buchanan,Esq.,CE	5	1 0	17	24·21	163
D Dundee (Harbour)	,, ,, ,,	5	0 10	14	29·67	206
D Broughty Ferry (Douglas Ho.)	Mr. K. Graham	5	5 6	60 T	27·67	172
,, ,, (CoronaGardens)	Mr. J. Machar	5	4 6	96	27·46	197
D Dundee (Eastern Necropolis)	Mr. J. Carnochan	3	0 4	199 T	28·30	143
D ,, (,, ,,)*new*	,, ,, ,,	5	0 4	199 T	28·74	201
,, (Dens Works)	Messrs. Baxter Bros.	5	...	119 T	28·51	202
,, (Westgreen House)	Dr. Rorie	...	...	...	31·95	...
D ,, (Camperdown Works)	Messrs. Cox Bros.	5	3 8	290	23·16	125
Liff	Col. F. J Stuart Gray	5	1 3	260 T	32·89	199
D†Craigton	G. Baxter, Esq., C.E.	8	1 0	481	38·10	158
† ,, M	,, ,,	11	3 0	481	36·69	...
†Crombie Reservoir M	,, ,,	11	3 0	522 T	34·64	...
†Hill Head M	,, ,,	11	3 0	570 T	35·56	...
D Arbroath (Waterworks)	W. Stewart, Esq., C.E.	5	0 11	57	23·60	151
,, (,,) M	,, ,, ,,	5	1 0	57	24·03	...
D ,, (,,) *Tower*	,, ,, ,,	5	48 0	157	17·34	132
,, (,,) ,, M	,, ,, ,,	5	48 0	157	17·20	...
D ,, (Dishland Hill)	Mr. J. Campbell	5	0 11	69	21·79	171
D Inverarity Manse	Rev. P. Stevenson	5	1 0	301 T	32·71	147
Glamis Castle	Mr. T. Wilson	...	...	...	30·41	...
Kirriemuir (Lintrathen)	G. Baxter, Esq., C.E.	8	1 0	700	34·40	...
D ,, (,, Balnakeilly)	,, ,, ,,	8	1 0	700	34·44	194
,, (,, ,,)M	,, ,, ,,	8	1 0	700	33·72	...
,, (,, CreichHill)M	,, ,, ,,	8	1 0	1500	30·10	...
,, (,, Longdrum)	,, ,, ,,	8	1 0	1142	41·40	...
,, (,, Glen Dye)	,, ,, ,,	8	1 0	1409	45·50	...
,, (,, Barney)	,, ,, ,,	8	1 0	1145	40·80	...
,, (,, Glen Damff)	,, ,, ,,	8	1 0	1480	38·90	...
D ,, (Lednathie)	Mr. W. Morrison	5	1 0	720	47·74	216
Montroseness	Bd. of Northern Lights	...	...	...	31·65	143
D Montrose (Melville Gardens)	Mr. J. R. Findlay	5	9 0	23 T	22·41	124
D ,, (Sunnyside Asylum)	Dr. J. C. Howden	5	0 10	200	25·02	153
D ,, (Kinnaber W.W.)	Mr. J. R. Findlay	5	1 0	38 T	24·88	163
Brechin (Stracathro Gardens)	RtHonJACampbell,MP	5	1 0	240 T	29·84	...

DIVISION XVII.—NORTH EASTERN COUNTIES.

KINCARDINE.						
Johnshaven (Brotherton)	Mrs. Scott	5	1 0	...	25·43	...
Laurencekirk (Johnstone Lodge)	Dr. Buchan, F.R.S.	...	...	...	30·42	...

DIVISION XVII.—NORTH EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height above Ground.	Rain Gauge. Height above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
KINCARDINE—(*con.*)						
The Burn [Brechin]... ..*Garden*	Col. C. McInroy, C.B...	5	0 6	245	35·60	...
D ,, ,, [,,] .....*House*	,, ,, ,,	5	0 6	250	35·04	197
Girdleness	Bd. of Northern Lights	...	...	...	26·41	162
ABERDEEN.						
D†Braemar	J. Aitken, Esq.	8	0 9	1114 T	36·76	207
D Forest of Glen Tana	Sir W. C. Brooks, Bt..	5	1 0	576 T	31·85	114
D Cromar (Logie Coldstone Manse).	Rev. Dr. Davidson.....	5	1 0	694 ⅄	29·59	191
,, (,, ,, Loanhead)	Mr. A. Farquharson ...	5	1 0	743 ⅄	31·35	190
,, (Tillypronie).....	Mr. R. Littlejohn	5	1 0	1120 ⅄	30·87	214
D Aberdeen (Cranford).....	D. McHardy, Esq. ...	5	1 0	120 T	30·93	231
,, (Duthie Park)	Dr. Buchan, F.R.S. ...	...	...	40	29·15	193
,, (King's College)	The Meteor. Council ...	8	2 0	48	28·68	219
Ellon (Mains of Waterton)	T. F. Jamieson, Esq....	5	1 0	100	26·90	...
,, (Kermuck)	Mr. T. Mair	11	0 6	300 T	29·59	...
Haddo House	Mr. J. Forrest	5	0 5	180 T	30·55	...
Peterhead (Buchanness)	Bd. of Northern Lights	...	...	...	22·73	...
,, (H.M. Prison)	Dr. Buchan, F.R.S. ...	...	...	109	23·64	139
D Old Deer.....	J. Walker, Esq.....	5	2 0	135 ⅄	30·61	224
Kinnairdhead.....	Bd. of Northern Lights	...	...	...	16·25	...
BANFF.						
Aberlour.....	J. McGowan, Esq.	5	1 0	...	31·01	...
D Keith (H.R.S.)	The Station Agent.....	5	1 0	364 T	29·93	173
Banff (Earl Hill)	A. Ramsay, Esq.	5	1 0	115 T	30·00	238
D Boyndie (Whitehills)	Rev. W. Anderson ...	5	1 0	68 ⅄	26·94	219
Cullen House	Mr. J. F. Smith.....	5	1 0	100 T	30·30	...
ELGIN OR MORAY.						
Grantown	Mr. W. Duncan.....	5	1 1	712 ⅄	28·19	187
Craigellachie(WesterElchiesSch)	Mr. J. Milne	5	1 0	560 T	27·67	157
D Forres H.R.S.	The Station Agent.....	5	1 0	25	17·68	167
,, (Grange Hall)	J. Grant Peterkin, Esq.	5	1 0	52 T	15·92	...
Kinloss	J. Mackessack, Esq. ...	5	1 3	20 T	18·34	...
Gordon Castle.....	Mr. C. Webster.....	8	1 0	107 ⅄	28·07	192
D Elgin (Highfield)	R. Cameron, Esq.	5	1 0	80 T	21·78	172
Covesea Skerries	Bd. of Northern Lights	...	...	...	15·95	118
NAIRN.						
D Cawdor (Budgate).....	J. Joss, Esq.	5	1 0	250 T	23·03	195
D Nairn (Achareidh).....	Col. Clarke	8	1 0	59 T	17·90	171
,, (School Ho.).....	The Meteor. Council ...	8	1 9	84	19·20	198

DIVISION XVIII.—NORTH WESTERN COUNTIES.

WEST ROSS.‡						
Applecross Gardens	Mr. D. McCowan	5	1 0	70 ⅄	53·85	...
D Strathconan (Dalbreac).....	Mr. D. McIver	5	1 0	450	51·32	128

‡ Including Cromarty.

DIVISION XVIII.—NORTH WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	WEST ROSS—(*con.*)						
	Glencarron Lodge	Mr. D. D. Munro	5	1 0	504	77·77	...
D	Loch Torridon (Bendamph)	Hon. L. F. King-Noel..	5	0 5	25	82·86	230
D	,, ,, (Shieldaig)	C. D. Rudd, Esq.	...	4 0	30	47·25?	189
	Loch Vraon	Sir J. Fowler, Bt.	8	0 7	750	62·55	...
	Braemore House	,, ,, ,,	8	0 7	750	60·32	...
	,, Lodge=Foich	,, ,, ,,	8	0 7	100	44·75?	...
	Isle of Lewis (Stornoway)	Bd. of Northern Lights	...	3 4	31 ?	31·23	205
	,, (,,)	The Meteor. Council....	8	1 0	24	45·24	248
	,, (Butt of Lewis)	Bd. of Northern Lights	...	3 6	...	34·05	154
	EAST ROSS.‡						
	Contin (Kinnahaird)	W. Ross, Esq.	5	1 2	74	21·97	...
	Strathpeffer Spa (Ambatovory)	J. T. Fox, Esq.	5	1 0	254	27·70	229
D	,, Station	Mr. J. Baxter	5	2 0	150	31·07	206
	Evanton (Swordale House)	Dr. Buchan, F.R.S.	...	...	...	23·10	...
D	Alness (Ardross Castle)	Mr. R. Massie	5	1 0	450 ↑	30·98	195
D	Fearn (Lower Pitkerrie)	R. Gordon, Esq., C.E..	5	1 0	95	16·61	115
	,, (Geanies Mains)	Miss Hope Douglas	5	1 0	200 ↑	17·46	...
	Tarbetness	Bd. of Northern Lights	...	3 4	61 ?	16·57	...
	WEST INVERNESS.						
	Ben Nevis Observatory	Dr. Buchan, F.R.S.	5	...	4407	155·78	252
D	Fort William (Ardtraigh)	C. Livingstone, Esq.	5	1 0	103 ↑	78·00	222
	,, ,, (Observatory)	The Meteor. Council	8	1 8	33	74·72	227
	Moidart (Roshven, Glenmutchkin)	Mr. J. McPherson	5	1 0	100	77·54	230
	,, (,,)	Prof. Blackburn	5	1 0	68 ↑	60·95	254
D	Loch Shiel (Glenaladale)	Major Macdonald	5	1 2	50 ?	102·97	232
D	Arisaig	Mr. A. Grant	5	1 0	20 ?	56·64	226
D	Glenquoich	Mr. D. Grant	8	2 4	660	105·89	237
	Skye (Oronsay)	Bd. of Northern Lights	...	0 6	15 ?	36·73	118
	,, (Kyleakin)	,, ,, ,,	...	...	...	45·32	175
D	,, (Scalpay Island)	Mr. D. Gunn	5	1 0	4	74·36	222
	Barra (Barrahead)	Bd. of Northern Lights	...	3 0	640 ?	30·35	180
	S. Uist (Ushenish)	,, ,, ,,	...	0 4	157 ?	36·78	114
	N. Uist (Monach)	,, ,, ,,	...	...	...	45·08	178
D	,, (Loch Maddy)	J. M. Fraser, Esq.	5	1 0	...	47·32	195
	Harris (Island Glass)	Bd. of Northern Lights	...	...	...	37·99	180
	EAST INVERNESS.						
	Invergarry	Mrs. Ellice	5	1 0	...	51·73	...
	Kingussie	Dr. Buchan, F.R.S.	...	...	824	24·84	198
D	Fort Augustus (St. Benedict's)	Rev. M. Wall	5	1 6	68 ↑	41·83	238
D	Aviemore (H.R.S.)	The Station Agent	5	1 0	710	29·34	231
	Loch Ness (Killin)	British Aluminium Co.	5	...	1060	56·10	...
	,, ,, (Whitebridge)	,, ,, ,,	...	...	...	31·95	...
	,, ,, (Aberchalder)	,, ,, ,,	...	...	...	30·57	...
	,, ,, (Foyers)	,, ,, ,,	5	...	70	34·61	...

‡ Including Cromarty.

DIVISION XVIII.—NORTH WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground.	Height Above Sea Level	Depth of Rain 1897	Days on which .01 or more fell.
				ft. in.	feet.	inches.	
	EAST INVERNESS—(*con.*)						
D	Loch Ness (Drumnadrochit)	Mr. A. Grant	5	1 0	104 T	34·29	209
	Inverness (High School)	Dr. Buchan, F.R.S.	...	...	114	22·73	174
D	Beauly (Lovat Estate Office)	J. T. Garrioch, Esq.	5	1 3	25	25·94	151

DIVISION XIX.—NORTHERN COUNTIES.

	SUTHERLAND.						
	Invershin	Mr. G. Young	5	4 0	20 T	31·43	...
D	Golspie (H.R.S.)	The Station Agent	5	0 9	27	22·13	129
D	,, (Dunrobin Castle)	Mr. D. Melville	5	1 0	14 ⅄	24·27	158
	,, (,, ,,)M	,, ,,	3	0 3	13 ⅄	22·90	...
	Lairg	Rev. D. Macrae	5	0 10	385 ?	26·06	223
	Stourhead	Bd. of Northern Lights	...	...	...	29·30	146
	Cape Wrath	,, ,, ,,	3	3 6	355	30·55	...
	CAITHNESS.						
	Wick	The Meteor. Council	8	1 9	77	21·85	217
D†	Watten (H.R.S.)	The Station Agent	5	2 6	75 T	22·99	199
	Thurso (Holburnhead)	Bd. of Northern Lights	3	0 8	60 ?	31·70	138
	Pentland Skerries	,, ,, ,,	...	3 3	72 ?	27·07	105
	ORKNEY.						
D	South Ronaldshay (Roeberry)	J. Gray, Esq.	5	1 2	101 ⅄	32·16	226
	Hoy (Cantickhead)	Bd. of Northern Lights	...	0 6	...	25·90	104
	,, (Graemsay Sound, West=Low)	,, ,, ,,	...	3 4	...	30·40	170
	Pomona (Deerness)	Dr. Buchan, F.R.S.	...	1 0	172	30·24	175
	,, (Kirkwall)	Mr. J. W. Cursiter	3	1 3	20	34·71	218
	Hellyar Holm	Bd. of Northern Lights	...	...	..	25·69	117
	Auskerry	,, ,, ,,	...	...	...	19·35	101
	Shapinsay (Balfour Castle)	Mrs. Balfour	5	0 6	50	28·93	...
	Sanda (Start Point)	Bd. of Northern Lights	11	0 6	29 ?	39·50	137
	North Ronaldshay	,, ,, ,,	...	...	...	28·95	154
	SHETLAND.						
	Fair Isle, S.	Bd. of Northern Lights	...	...	...	21·05	142
	,, ,, N.	,, ,, ,,	...	...	...	30·92	...
	Sumburghead	,, ,, ,,	...	...	...	38·77	102
	,, (Dunroseness)	The Meteor. Council	8	1 0	84	34·75	242
	Bressay	Bd. of Northern Lights	...	...	...	33·30	130
	Sule Skerry	,, ,, ,,	...	...	...	35·35	109

IRELAND.

DIVISION XX.—MUNSTER.

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height above Ground.	Rain Gauge. Height above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
CORK.						
D Castletownshend (Glen Barrabane)	E. B. Coghill, Esq. ...	5	3 0	25 L	39·62	207
D Dunmanway (Coolkelure)	Col. Shuldham	5	1 6	500 T	84·87	249
Roche's Point.....	The Meteor. Council ...	8	1 9	32	48·18	206
D Douglas (Villa Franca).....	R. C. Sikes, Esq.	5	1 0	49 T	46·63	218
D Cork (Queen's College)	Prof. Jack	8	1 0	60	44·89	221
D ,, (The Palace)	Rt. Rev. Bishop of Cork	5	1 0	40 L	42·96	198
D ,, (Wellesley Terrace)	W. Miller, Esq.....	5	1 0	190 B	44·36	213
D ,, (St. Ann's Hill)	Dr. M. Altdorfer	5	1 0	240	47·11	233
D Mallow (Summer Hill)	J. F. Williamson, Esq.	5	1 10	230 T	45·16	221
D ,, (Longueville)	R. E. Langfield, Esq...	5	0 10	300	37·36	250
Doneraile (Carker House).....	The Meteor. Council ...	5	1 0	267	46·07	215
KERRY.						
D Darrynane Abbey	D. O'Connell, Esq.....	5	1 0	13 T	54·85	255
D Waterville (Iveragh Lodge).....	T. J. Wilmot, Esq.....	5	1 0	86 T	62·25	255
Kenmare (Derreen)	Mr. W. Holbrow	5	1 0	74 T	72·63	222
Valencia (Glanleam)	The Meteor. Council ...	8	1 0	12	62·22	245
Cahirciveen	,, ,, ,, ...	8	2 0	32	62·03	253
Mangerton ..... M	Ven Archdeacon Wynne	8	3 0	1760	113·00?	...
Gap of Dunloe (Garrymeen).....	,, ,, ,, ...	8	3 0	75	89·75	...
D Killarney (Woodlawn)	,, ,, ,, ...	5	1 1	96 T	63·42	233
WATERFORD.						
D Cappoquin	Mr. W. Doolan	5	0 9	283	46·17	251
D Knockaderry	M.J Fleming, Esq., C.E.	5	2 6	233 T	51·59	246
Waterford (Brook Lodge).....	C. P. Bolton, Esq., C.E.	5	1 0	104 T	47·00	205
D ,, (Cove Lodge)	T. N. Harvey, Esq. ...	11	4 9	76	44·73	205
,, (,, ,,) .....M	,, ,, ,, ...	5	1 0	72	46·25	...
D ,, (Tycor)	M.J. Fleming. Esq. C.E.	5	0 7	171 T	43·86	176
D Portlaw (Mayfield).....	J. Anderson, Esq.....	5	4 0	70	53·91	216
D Glenam [Clonmel]	Miss Grubb.....	8	1 4	80 T	45·88	211
TIPPERARY.						
D Clonmel (Bruce Villa)	J. H. Grubb, Esq.....	5	1 3	110 T	41·61	213
Cahir Abbey	Mrs. W. Rochfort	5	0 6	...	42·80	178

DIVISION XX.—MUNSTER—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which .01 or more fell.
				ft. in.	feet.	inches.	
	TIPPERARY—(*con.*)						
	Ballina [Killaloe]	T. Crosthwaite, Esq. C.E.	5	2 0	124 T	52·69	253
D	Derry Castle [Killaloe]	Mr. T. Manly	5	1 6	580 T	56·75	228
D	Nenagh (Clashnevin)	J. Mounsey, Esq.	5	1 2	300 T	42·08	231
D	,, (Castle Lough)	A. Parker, Esq.	5	1 3	120 T	48·15	220
D	Ballingarry (Hazelfort)	Mrs. Fraser	5	1 0	...	40·12	229
	LIMERICK.						
	Adare Manor	The Meteor. Council	...	...	...	42·18	223
	Foynes	,, ,, ,,	5	1 0	104	50·26	211
	Pallaskenry (Kilcornan)	Mr. J. Smyth	5	1 0	130	38·23	...
	Limerick (Roxborough)	A. W. Shaw, Esq.	8	1 6	112 T	45·53	228
	,, (,,)	,, ,, ,,	5	1 0	107 T	44·67	209
	,, (Victoria Terrace)	J. Horan, Esq.	5	1 0	60 T	42·60	206
	,, (Mulgrave Street)	The Meteor. Council	5	1 0	...	46·30	...
	CLARE.						
	Carrigaholt Castle	W. C. V. Burton, Esq.	...	...	30	46·23	235
D	Killadysert (Paradise Hill)	Rev. H. Henn	5	0 11	105 T	55·63	246
D	O'Briensbridge (Ross)	J. Digan, Esq.	10	2 0	93	49·26	207
D	Broadford (Hurdlestown)	Colonel Bentley	5	1 0	167 T	41·30	226
	Ennis (Roslevan)	Mrs. Scott	5	1 11	40	45·04	207
	Miltown Malbay	M. Molohan, Esq.	5	1 0	400 T	60·79	...
	Inagh (Mount Callan)	The Meteor. Council	5	1 0	480	72·94	240
D	Lahinch (Moy House)	Miss Bowes	5	1 0	53	52·28	248

DIVISION XXI.—LEINSTER.

	WEXFORD.						
D	New Ross (Longraigue)	J. W. Deane, Esq.	5	1 0	210 T	46·55	207
D	Wexford (Bann-aboo)	Col. Magrath	8	4 0	9	44·06	185
D	Templeudigan (Ballindoney)	J. Budgen, Esq.	5	1 0	...	55·92	221
	Enniscorthy (Ballyhyland)	Mrs. Moffat	5	1 0	365 T	50·01	...
	,, (Monksgrange)	E. M. Richards, Esq.	5	1 0	565 B	62·03	261
D	Oulart (Wells)	C. M. Doyne, Esq.	5	1 0	215 T	42·31	179
D	Gorey (Courtown House)	Rt Hon Earl of Courtown	5	3 0	80 T	38·48	182
	KILKENNY.						
D	Rockenham [Waterford]	A. E. Graves, Esq.	8	2 6	140 T	46·69	164
D	Inistioge (Woodstock)	Lady Louisa Tighe	5	1 0	400 T	52·22	197
D	Graigue (Brandondale)	R. R. Burtchaell, Esq.	5	2 0	90 T	46·63	155
	Kilkenny (Lavistown)	late D.A. Milward, Esq.	5	2 0	180 T	40·81	194
	,, Castle	The Meteor. Council	8	1 0	208	41·43	201
D	,, (Sion Villa)	J. O'Connell, Esq., C.E.	5	1 0	198	40·66	215
	Goresbridge (Barraghcore House)	H. de M. Fleming, Esq.	...	...	...	38·02	215

DIVISION XXI.—LEINSTER—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which .01 or more fell.
WICKLOW.							
D Laragh (Glendalough)	Wyndham H Wynne Esq	5	2	9	460 T	65·38	236
Newcastle (Killadreenan)	B. H. Steede, Esq.	8	1	2	255	40·19	179
Greystones (Knockdolian)	R Cathcart Dobbs Esq CE	5	1	2	68 T	42·89	210
D† Bray (Fassaroe)	R. M. Barrington, Esq.	10	5	0	250	44·01	205
CARLOW.							
D Bagnalstown (Fenagh House)	D. R. P. Beresford, Esq	5	1	0	340	39·80	179
D Carlow (Browne's Hill)	W. Browne Clayton, Esq	5	1	0	291 T	39·48	208
QUEEN'S COUNTY.							
Abbey Leix (Blandsfort)	J. L. Bland, Esq.	5	3	0	532 T	43·96	235
KING'S COUNTY.							
D Parsonstown (Birr Castle)	Rt Hon Earl of Rosse FRS	8	1	0	180	37·98	219
,, (,, ,,)	,, ,, ,,	8	0	10	183	37·84	217
Victoria Lock [Meelick]	T. Crosthwaite, Esq. C.E.	5	2	0	119	33·39	179
D Banagher	Mr. J. Deegan	5	2	0	170	38·31	153
Tullamore	Rev. R. S. Craig	5	1	0	201 T	35·96	...
KILDARE.							
D Straffan House	Mr. F. Bedford	5	2	0	240 T	37·57	206
DUBLIN.							
Glen-na-Smoel (Water Works)	F. P. Dixon, Esq., C.E.	5	1	6	516 T	52·32	244
D Killiney (Cloneevin)	R. O'B. Furlong, Esq.	5	1	0	250 T	31·11	204
Rathmines (Terenure)	F. P. Dixon, Esq., C.E.	8	0	6	125 T	29·04	210
,, (Leinster Road)	E. H. Cannon, Esq.	5	1	0	170	29·57	203
D† Dublin (FitzWilliam Square)	J. W. Moore, Esq., M.D.	8	1	6	54 T	29·34	210
D ,, (Phœnix Park)	Major Hellard, R.E.	8	1	0	155 T	30·79	211
D Lucan (The Garden)	Mr. P. Reid	5	1	0	105 T	30·99	169
D Glasnevin (Botanic Gardens)	F. W. Moore, Esq.	8	1	0	68 T	32·92	200
D Balbriggan (Ardgillan)	Capt. Taylor	5	1	0	210	30·78	199
,, (,,)	,, ,,	8	1	0	210	31·27	...
D ,, (Laragh)	Rev. S. P. Warren	5	1	0	57 T	29·56	217
MEATH.							
D Summerhill House	Rt. Hon. Lord Langford	5	1	0	372	37·35	230
Athboy	C. P. Coghill, Esq.	8	1	3	227	36·30	162
Kells (Headfort)	The Marquis of Headfort	5	3	6	230	51·66	225
D Moynalty (Westland)	W. A. Barnes, Esq.	5	1	2	260 T	43·97	227
D Drumconrath (Aclare House)	Admiral Singleton, C.B.	10	2	6	170 T	39·20	225
D ,, (Corstown House)	,, ,, ,,	5	3	0	153 T	31·54	187
WESTMEATH.							
D Athlone (Twyford)	J. P. Hodson, Esq.	5	5	0	188 T	42·08	243
D Mullingar (Belvedere)	Mr. J. Bayliss	5	1	0	367 T	42·76	204

DIVISION XXI.—LEINSTER—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1897	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	LOUTH.						
D	Ardee (Lissrenny)	T. F. Filgate, Esq.....	8	0 10	75 T	36·53	219
D	Dundalk (Farndreg)	J. Barton, Esq.	5	1 0	90 T	33·36	198
D†	Greenore.....	T. Chambers, Esq.....	5	1 0	4 L	34·75	205
	LONGFORD.						
	Cloondrah	T.Crosthwaite,Esq.C.E.	5	2 0	130	34·19	266
D	Edgeworthstown(CurrygraneHo)	J. M. Wilson, Esq.....	5	1 0	265 T	41·90	214

DIVISION XXII.—CONNAUGHT.

	GALWAY.						
D	Woodpark [Scariff]	R. F. Hibbert, Esq. ...	5	1 0	170 T	48·70	241
D	Galway (Queen's College).....	Prof. Anderson	5	9 0	30	47·43	229
D	Ballinasloe	W. H. Kempster, Esq.	5	3 0	160 T	44·46	241
D	Woodlawn	Mr. A. Porter.....	5	3 6	300 T	47·14	223
D	Ahascragh (Clonbrock)	Rt.Hon.Lord Clonbrock	10	5 4	200 T	45·32	163
D	Clifden (Kylemore House)	Mr. T. McNab	5	1 0	105	88·58	229
D	,, (,, Castle)	Mr. W. Comfort.....	5	0 9	170 T	70·78	199
	Tuam (Castle Hacket)	Mrs. Percy Bernard ...	5	1 0	...	48·44	218
	,, (Gardenfield) ..... M	H. Kirwan, Esq.	5	1 0	155 T	48·98	...
	,, (,,) ... *Snowdon*	,, ,, ,, ...	5	6 0	160 T	48·51	...
	ROSCOMMON.						
	Athlone	T.Crosthwaite,Esq.C.E.	5	2 0	130 T	37·85	205
	Rooskey	,, ,, ,,	5	2 0	136 T	40·90	267
	MAYO.						
D	Cong (The Glebe)	Rev. R. Y. Lynn	5	1 11	112 T	56·81	259
	Ballinrobe (Cranmore)	Miss Knox	5	0 9	99	54·44	...
	,, (Kilrush)	J. Simson, Esq.	5	1 0	120 T	40·92	...
D	Crossmolina (Enniscoe).....	J. Pratt, Esq.....	5	0 11	74 T	56·38	265
	Belmullet	The Meteor. Council ...	8	1 0	40	47·48	239
	SLIGO.						
	Ballymote (New Park)	R. A. Duke, Esq.	5	1 2	300	47·85	183
D	Collooney (Markree Observatory)	Miss E. Reynolds	5	1 0	130 T	46·08	259
	,, (,, ,,)	,, ,, ,, ...	5	16 6	148 T	39·50	245
D	Ballysadare Bay (Glen Lodge)...	Vernon Cochrane, Esq.	5	1 0	14	44·44	229
	LEITRIM.						
	Jamestown (Albert Lock).....	T.Crosthwaite,Esq.C.E.	5	2 0	142 T	36·07	193
	Carrigallen	The Meteor. Council ...	...	...	...	46·62	243
	Ballinamore (Lawderdale)	J.O. Lawder, Esq.,C.E.	5	1 0	275 T	50·82	231
	Drumshanbo	T.Crosthwaite,Esq.C.E.	5	2 0	165 T	46·09	165

DIVISION XXIII.—ULSTER.

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet	Depth of Rain. 1897 inches.	Days on which .01 or more fell.
CAVAN.							
D Stradone House	Mr. J. Hart	5	1	0	280	45·71	218
Cavan (Water Works) M	Mr. W. H. Morris	8		...	304	42·50	...
D Belturbet (Cloverhill)	Mrs. Sanderson	5	1	0	200 T	41·30	229
D ,, (Red Hills)	Mrs. Whyte Venables..	5	0	9	208 ⅄	45·99	221
MONAGHAN.							
Dartrey [Cootehill]	Mr. F. Prince	5	3	0	265	42·74	203
D Monaghan (Rowantree House)	Dr. J. C. Hall	5	5	6	240	35·82	203
ARMAGH.							
D† Bridge Street [Newry]	J. L. D. Meares, Esq...	5	1	0	22 ⅄	43·42	221
D Armagh Observatory	Dr. Dreyer ..	8	1	0	205 ⅄	35·07	218
D Rich Hill (Fruitfield)	Messrs. Lamb Bros. ...	5	3	9	...	35·41	215
D Loughgall (Manor House)	Mrs. Cope	5	1	0	205 T	35·27	195
D Charlmont Lock [Moy]	W.J. O'Neill, Esq.,C.E.	5	1	0	61 T	33·18	158
D Lurgan (Belle Vue)	S. A. Bell, junr., Esq..	5	0	5	200 T	30·07	200
DOWN.							
D† Warrenpoint (Summer Hill)	B. M. Kernan, Esq. ...	5	1	0	30 L	42·75	130
D Rathfryland (Ballynagappoge)	J. Smyth, Esq., C.E....	5	1	0	300	35·43	167
D† Castlewellan (Lough Island)	,, ,, ,,	5	1	0	440 T	48·65	182
Banbridge (Katesbridge)	A. Mulligan, Esq.	5	1	0	230	28·97	...
D Seaforde	Rt. Hon. Col. Forde ...	8	0	5	180 ⅄	39·58	201
D Banbridge (Corbet Reservoir)	J. Smyth, Esq., C.E....	5	1	0	234	29·85	135
D† ,, (Milltown)	,, ,, ,, ...	8	0	8	200 T	32·81	213
D† Waringstown	Col. Waring, M.P. ...	8	0	8	191 ⅄	39·89	205
D Lisburn (Union Locks)	W.J. O'Neill,Esq., C.E.	5	1	0	138 T	35·70	175
Donaghadee	The Meteor. Council ...	8	1	6	30	34·13	222
ANTRIM.							
Stonyford (Belfast W. W.)	FWMcCulloughEsq.CE	5	1	6	437 ⅄	35·00	225
D† Belfast (Queen's College)	Mr. W. Taylor	11	7	4	68 ⅄	35·73	196
D ,, (Springfield)	J. Firth, Esq.	5	1	0	150 T	42·79	215
† ,, (Antrim Road)	FWMcCulloughEsq.CE	7	7	0	144 T	38·48	199
Antrim (The Manse)	Rev. W. A. Adams ...	5	1	0	150	40·72	...
Carrickfergus (Dorisland)	FWMcCulloughEsq.CE	5	1	0	250 ⅄	43·42	259
,, (South Woodburn)	,, ,, ,,	5	1	0	640 ⅄	44·18	239
,, (North Woodburn)	,, ,, ,,	5	1	0	735 ⅄	47·66	247
,, (Copeland) M	,, ,, ,,	5	1	0	380 ⅄	47·70	...
,, (,,)	,, ,, ,,	5	1	0	424 ⅄	47·49	248
,, (Lough Mourne)	,, ,, ,,	5	1	0	596 ⅄	50·19	248
Ballynure (Ballyboley)	Mr. T. H. Craig	5	1	4	400	44·28	203
D Ballymena (Harryville)	J. R. Williams, Esq....	5	1	5	150 T	41·46	241
D Broughshane (Quolie)	H. O'Hara, Esq.	5	1	4	893	46·66	214
D Ballymoney (Balnamore)	W. H Lawlor, Esq. ...	5	1	5	50 T	37·89	262
Stranocum (Gardenvale)	A. McNeill, Esq.	5	1	0	160	42·73	193
D Bushmills (Dundarave)	Sir F.E. Macnaghten, Bt	5	1	0	162 T	37·94	237

DIVISION XXIII.—ULSTER—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground. ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1897 inches.	Days on which .01 or more fell.
LONDONDERRY.							
D Garvagh (Moneydig)	H. R. Morrison, Esq...	5	1	0	121	39·39	201
D Londonderry (Clooney Terrace)..	Mr. J. Conroy	5	1	0	68 T	41·59	247
,, (The Asylum)	T. Campbell, Esq.....	5	1	0	36 T	42·28	226
D ,, (Creggan Res.).....	Mr. J. Hutchison	8	1	0	320 T	40·62	246
D Limavady	Reps. of C D Campbell Esq	5	4	0	81 T	35·59	224
,, (Drenagh)	C. T. McCausland, Esq	5	1	0	80	37·28	243
D Coleraine.....	J. Kennedy, Esq.	5	4	0	52 T	38·40	220
TYRONE.							
D Stewartstown (The Square)	A. Johnston, Esq.	5	1	4	300 T	39·85	204
D Omagh (Edenfel)	Col. Buchanan, C.B. ...	8	1	0	280 T	46·31	228
D Newtown Stewart (Baron's Court)	Mr. R. Bell.....	5	1	0	250 T	51·10	227
DONEGAL.							
D Killybegs	A. Brooke, Esq.....	5	1	0	30	64·87	250
Raphoe (Convoy Ho.)	Col. Montgomery	5	1	0	110 T	36·98	212
Rathmullen	Dr. Loughnan	5	1	0	1	41·76	218
,, (Fort Royal)	Major Montgomery ...	5	1	0	35	43·14	...
Bloody Foreland (Ardnadrean)..	Rev. W. S. Griffith ...	5	0	9	39	43·94	...
Buncrana (Rockfort).....	T. Colquhoun, Esq. ...	5	1	0	40 T	41·04	224
D Moville (Prospect Villa)	Mr. J. Lowry	8	3	0	80	42·55	251
D Horn Head	C. F. Stewart, Esq. ...	5	1	0	160	43·32	210
D Lough Swilly (Carrablagh)	H. C. Hart, Esq.	5	1	0	130	44·14	221
Malin Head	The Meteor. Council ...	8	1	0	220	32·79	225

ARRANGEMENTS

FOR THE

SYSTEMATIC OBSERVATION

AND

RECORD

OF THE

RAINFALL OF THE BRITISH ISLES.

COMPILED BY

G. J. SYMONS, F.R.S.,

Chevalier de la Légion d'Honneur;
Albert Medallist for 1897.
Secretary Royal Meteorological Society; Membre du Conseil Société Météorologique de France; Member Scottish Meteorological Society; Korrespondirendes Mitglied der Deutsche Meteorologischen Gesellschaft; Fellow Sanitary Institute; Fellow Royal Colonial Institute; Membre correspondant étranger Soc. Royale de Médecine Publique de Belgique; Socio correspondiente Sociedad Cientifica Antonio Alzate, Mexico, &c., &c.

FIFTEENTH EDITION.

LONDON:
EDWARD STANFORD, COCKSPUR STREET, S.W.
1898.

Introductory and Historical.—I cannot help this section appearing to be egotistical; the rainfall organization being entirely my own creation, it is impossible for it to be otherwise.

In the early part of the year 1859 I began collecting copies of records of the fall of rain, and early in 1861 wrote to all the observers of whom I was then aware, and asked them to send me all the records for the year 1860 that they could. I received 168 returns, and printed a table showing the total fall at all those places, being a larger number than had ever before been classed together. This publication gave a stimulus to observers, and from that time onwards their number has steadily increased until it now exceeds 3,000.

The amount of information published has increased even more, for whereas at first I printed only the total annual fall, I now publish essays on various branches of rainfall enquiry, and full abstracts of the most remarkable falls in short periods (ten minutes, half-an-hour, and so on), the heaviest falls in one day, tables of the monthly fall at several hundred stations, and, in short, give all the information which I can collect and which it seems expedient to print.

From the foregoing it will be evident that the compilation of the present annual volume (of which the short title is "British Rainfall, 1896," &c.) is a very serious labour. The mere checking of more than three thousand returns takes a long time, and so does the due arrangement of the various facts reported, and by no means the least onerous matter is ensuring the accuracy of the printing of the whole.

During the first few years I not only gave my own time gratuitously to the work, but also bore all the cost of postages and of printing. It soon, however, became far too great for me to bear, and my correspondents kindly offered to share it with me. In 1865 the price of the annual volume was fixed at five shillings, and, although the size and cost of the volume has since so largely increased, that the price to the general public has had to be doubled, those observers who desire it are still allowed one copy at the old price. There are two reasons for this: (1) Because as the book could not be compiled without the help of observers, they ought to be allowed to have it as cheaply as possible; (2) Because a small number of the observers (about 400, whose subscriptions are duly published) contribute annually from one to ten guineas towards the general expenses of the work.

The existing state of matters is, therefore, shortly as follows. There are more than 3000 persons, well spread over England and Wales,

Scotland and Ireland, each of whom is, I hope, strictly obeying the rules on pages [237]. To each of them I send on December 31st each year, blank forms to be returned to me filled with the facts observed by them. At the same time I send a list of the various publications, and invite such pecuniary aid as it may be agreeable to them to send.

I ought, perhaps, to say what becomes of the subscriptions. I will mention some of the outlets. (1) There are more than a thousand observers whose returns have to be collected, examined, discussed, and printed, who do not contribute sixpence towards the cost thereof. (2) In some localities it is impossible to obtain volunteer observers, and there the observers receive regular salaries. (3) The mass of office work, correspondence, &c., is far beyond what I can myself accomplish; two regular assistants are, therefore, employed, and besides that, considerable sums are paid for extra assistance at times of pressure. (4) The expenditure for printing and postages is very large.

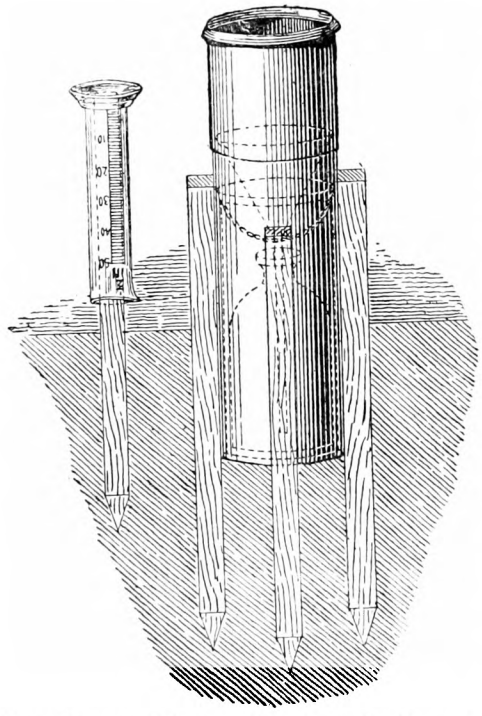
In addition to the annual volume, I publish a monthly periodical, *Symons's Monthly Meteorological Magazine*, giving, in addition to a full chronicle of the progress of meteorology, details of rainfall at upwards of 100 stations. This is sent free to subscribers.

It may, perhaps, be added that it always affords me pleasure to reciprocate as far as possible the assistance which the observers render to me, either by affording them meteorological information, data as to the height of their stations above sea level, or advice as to the purchase of instruments.

In short, the state of the case is this: I have given myself up to the collection of statistics of rainfall—old ones and current ones; I invite everybody to help me, both with observations and with funds, and I promise, in return, to render to all my correspondents all the help that is in my power.

Patterns of Rain Gauges, and where to Buy them.—This is not a pleasant section to write, for there is considerable jealousy among the manufacturers, and I am almost certain to be accused of favouritism by some one. However, I have never patented any pattern of rain gauge, and therefore leave the field open to all.

Upon one point it is necessary to be despotic, viz., that amateurs never try to make their own gauges; they are almost certain to go wrong in some respect, and nothing is more vexing, both to the observers and to myself, than for it to be discovered after observations have been recorded for a long time that the labour of years is vitiated by an inaccurate instrument.



For use in ordinary localities I recommend the Snowdon gauge; it is five inches in diameter, is easily fixed by four stakes, as shown; the glass jar, each division on which denotes $\frac{1}{100}$th of an inch of rain, when filled up to the top division holds 0·50 in., or half an inch; the bottle holds about three inches of rain, and, of course, in the very rare case of the fall exceeding that, the excess is saved by the can, and must be carefully measured. It costs 12s. 6d. or £1 1s., according as it is made of galvanized iron, or of copper. Where cost is no object, it is, by some, thought better to have a larger gauge, viz., eight inches diameter, costing from £2 to £3, but I do not advise it.

Snowdon pattern rain gauges can be obtained from any optician but it may be convenient to give, in alphabetical order, the names and addresses of a few of the principal makers (the gauges can easily be sent by Parcel Post):—

CASELLA, L., 147, Holborn, E.C.
HICKS, J. J., Hatton Garden, E.C.
NEGRETTI & ZAMBRA, Viaduct, E.C., and Regent Street, W.
PASTORELLI, F., Brook Street, New Bond Street, W.

Testing.—Wherever, and of whomsoever, a rain-gauge may be bought it is very desirable that the purchaser should insist upon having a certificate of its accuracy. Rain gauges are examined, and certificates issued, by Kew Observatory, and by myself, the charge in each case is the same, namely, 2s. 6d.

Blank Forms.—All blank forms required for returns to myself, and additional ones wherever desired, are supplied gratuitously, and even those sold are charged at little more than their actual cost.

Change of Residence.—Each observer is requested to decide upon a specific name for his station, and to notify immediately any change in the position of the gauge or the discontinuance of his record.

SUGGESTIONS FOR SECURING UNIFORMITY OF PRACTICE AMONG RAINFALL OBSERVERS.

I.—SITE.—A rain gauge should not be set on a roof, a slope, or a terrace, but on a level piece of ground, at a distance from shrubs, trees, walls, and buildings—at the very least, as many feet from their base as they are in height. Tall-growing flowers, vegetables, and bushes must be kept away from the gauge. If a thoroughly clear site cannot be obtained, shelter is most endurable from N.W., N., and E., less so from S., S.E., and W., and not at all from S.W. or N.E.

II.—OLD GAUGES.—Old established gauges should not be moved, nor their registration discontinued until, at least, two years after a new one has been in operation, otherwise the continuity of the register will be irreparably destroyed. Both the old and the new ones must be observed at the same time, and recorded for comparison. Changes, where inevitable, are least objectionable if made on January 1st.

III.—LEVEL AND FIXING.—The funnel of a rain gauge must be set quite level, and the gauge so firmly fixed that it will remain so in spite of any gale of wind or ordinary circumstance. Its correctness in this respect should be tested from time to time.

IV.—HEIGHT.—The funnels of gauges newly placed should be 1 ft. above grass. Information respecting height above sea level may be obtained from the Editor.

V.—RUST.—If the funnel of a japanned gauge becomes so oxidised as to retain the rain in its pores, or threatens to become rusty, it should have a coat of gas tar, or japan black. Copper gauges are free from this evil, and far the best.

VI.—FLOAT GAUGES.—The measuring rod should be detached from the float, and never be left in the gauge. If it is attached to the float, it should be pegged or tied down, and only allowed to rise to its proper position at the time of reading. To allow for the weight of the float and rod, these gauges are generally so constructed as to show 0 only when a small amount of water is left in them. Care must always be taken to set the rod to the zero or 0.

VII.—CAN AND BOTTLE GAUGES.—The measuring glass should always be held upright, or placed on a level slab; the reading is to be taken midway between the two apparent surfaces of the water.

VIII.—TIME OF READING.—Nine a.m. daily; if taken only monthly, then 9 a.m. on the 1st.

IX.—Date of Entry.—The amount measured at 9 a.m. on any day is to be set against the previous one; because the amount registered at 9 a.m. of, say, 17th contains the fall during 15 hours of the 16th, and only 9 hours of the 17th.

X.—Mode of Entry.—If less than one-tenth (·10) has fallen, the cypher must *always* be prefixed; thus, if the measure is full up to the seventh line, it must be entered as ·07, that is, no inches, no tenths, and seven hundredths. There must always be two figures to the right of the decimal point. Even in the case of one-tenth of an inch (usually written ·1) a cypher must be added, making it ·10. Neglect of this rule causes much inconvenience. All columns should be cast *twice*—once up and once down, so as to avoid the same error being made twice. Never copy a total, always cast the column afresh. When there is no rain, a line should be drawn rather than cyphers inserted.

XI.—Caution.—The amount should always be written down before the water is thrown away.

XII.—Small Quantities.—The unit of measurement being ·01, observers whose gauges are sufficiently delicate to show less than that, are, if the amount is under ·005, to throw it away, if it is ·005 to ·010 inclusive, they are to enter it as ·01.

XIII.—Absence.—Every observer should train some one as an assistant; but where this is not possible, instructions should be given that the gauge be emptied at 9 a.m. on the 1st of the month, and the water bottled, labelled, and tightly corked, to await the observer's return.

XIV.—Heavy Rains.—When very heavy rains occur, it is desirable to measure immediately on their termination, and it will be found a safe plan after measuring to return the water to the gauge, so that the morning registration will not be interfered with. Of course if there is the slightest doubt as to the gauge holding all that falls, it must be emptied, the amount being written down, and added to the subsequent measurement.

XV.—Snow.—In snow three methods may be adopted—it is well to try them all. (1) Melt what is caught in the funnel by adding to the snow a previously ascertained quantity of warm water, and then, deducting this quantity from the total measurement enter the residue as rain. (2) Select a place where the snow has not drifted, invert the funnel, and turning it round, lift and melt what is enclosed. (3) Measure with a rule the average depth of snow, and take one-

twelfth as the equivalent of water. This being a very rough method, is not to be adopted if it can be avoided. Some observers use in snowy weather a cylinder of the same diameter as the rain gauge, and of considerable depth. If the wind is rough, all the snow is blown out of a flat-funnelled rain gauge. Snowdon pattern gauges are much the best.

XVI.—OVERFLOW.—Hardly a year passes in which some gauges are not allowed to overflow, it is therefore necessary to call attention to the fact that there does not seem to be any part of the British Isles where 4 inches may not fall in 24 hours. It is not desirable to purchase any gauge which will not hold 6 inches.

XVII.—SECOND GAUGES.—It is desirable that observers should have two gauges, and that one of them should be capable of holding 8 inches of rain. One of the gauges should be registered daily, the other weekly or monthly as preferred, but always on the 1st of each month. By this means a thorough check is kept on accidental errors in the entries, which is not the case if *both* are read daily. Observers having two gauges and recording both daily, should keep the records distinct, and forward a copy of each. Never take a mean of two.

XVIII.—DEW AND FOG.—Small amounts of water are at times deposited in rain gauges by fog and dew; they should be added to the amount of rainfall, because (1) they "tend to water the earth and nourish the streams;" and not for that reason only, but (2) because in many cases the rain gauges can be visited only monthly, and it would then obviously be impossible to separate the yield of snow, rain, &c.; therefore, for the sake of uniformity, all must be taken together, and as except by watching all night it is never possible to be certain that small amounts are wholly dew, it is best to count all entries of ·01 in. or upwards as days with rain.

XIX.—DOUBTFUL ENTRIES.—Whenever there is the least doubt respecting the accuracy of any observation, the entry should be marked with a ?, and the reason stated for its being placed there.

XX.—BREAKAGE.—The Editor has no desire to supply rain gauges or glasses, or in any way to undertake, or interfere with, the business of Opticians; but the continuity and permanent accuracy of the records of his correspondents is of such importance, that any assistance in his power is always at their service.

XXI.—LEAKAGE.—Observers should test their gauges occasionally to see that the amount collected is neither increased nor decreased by leakage.

LIST OF PUBLICATIONS.

BRITISH RAINFALL,

Cloth 8vo, 10s. (to Observers, 5s.)

This is the general summary and epitome of the year's work; it contains a report upon the progress of rainfall investigations, and full records of the rainfall of each year. It is published annually, and all the volumes since 1864 can still be had.

SYMONS'S MONTHLY METEOROLOGICAL MAGAZINE,

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This was established in 1866, to afford a medium for the prompt publication of rainfall statistics, besides which it discusses all branches of meteorology. It numbers among its contributors many of the ablest meteorologists, and circulates in all quarters of the world.

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